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# METROPOLITAN TORONTO AND REGION TRANSPORTATION STUDY

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## CHOICES FOR A GROWING REGION

Prepared by the  
Department of Municipal Affairs  
Community Planning Branch

NOVEMBER 1967

SECOND REPORT OF A SERIES





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## DEPARTMENT OF MUNICIPAL AFFAIRS

### CHOICES FOR A GROWING REGION

A study of the emerging development pattern  
and its comparison with alternative concepts.

**Hon. W. Darcy McKeough**

Minister of Municipal Affairs

**W. H. Palmer**

Deputy Minister  
Municipal Affairs

**D. F. Taylor**

Director  
Community Planning Branch

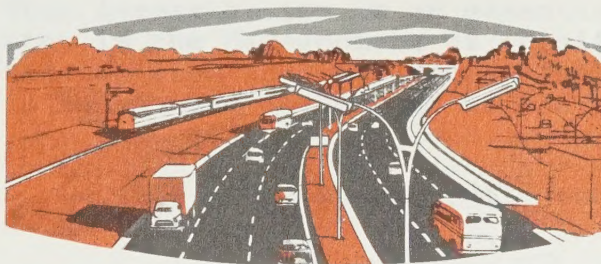




# METROPOLITAN TORONTO AND REGION TRANSPORTATION STUDY

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Toronto 2, Ontario.



November, 1967

The Hon. Irwin Haskett,  
Chairman,  
Executive Committee,  
Metropolitan Toronto and Region  
Transportation Study.

Dear Sir:

I have the pleasure of presenting the report "Choices for a Growing Region" prepared by the Community Planning Branch of the Department of Municipal Affairs. This is the second of a series of final reports of the Metropolitan Toronto and Region Transportation Study.

The material herein, was commissioned by the Committee. It was realized that MTARTS could not effectively advise on regional transportation needs without having a knowledge of the emerging development patterns within Metropolitan Toronto and surrounding region.

Consequently, these patterns are examined in this report. Current trends of growth were investigated, a number of "goals" were established and finally five developed concepts emerged as possibilities for the shape of the MTARTS region in the future.



ONTARIO  
PROVINCE OF OPPORTUNITY

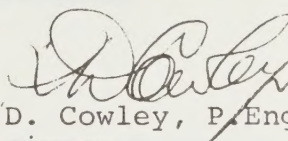




INTRODUCTION

This investigation is an essential first step in the development of specific plans and policies to guide public and private decisions and investment in the region.

Respectfully submitted,



R.D. Cowley, P.Eng.,  
Chairman,  
Technical Advisory and  
Coordinating Committee.







# INTRODUCTION

The Metropolitan Toronto and Region Transportation Study (MTARTS) was instituted by the Province of Ontario to recommend plans, policies and administrative arrangements for transportation in the Toronto-centred region.

To undertake a program for this vast assignment, a special Study staff was appointed. A committee structure had to be developed representing all involved Ontario Government agencies, the Municipality of Metropolitan Toronto and the major transportation operators in the region such as the railways and transit authorities.

## COMPONENTS OF STUDY

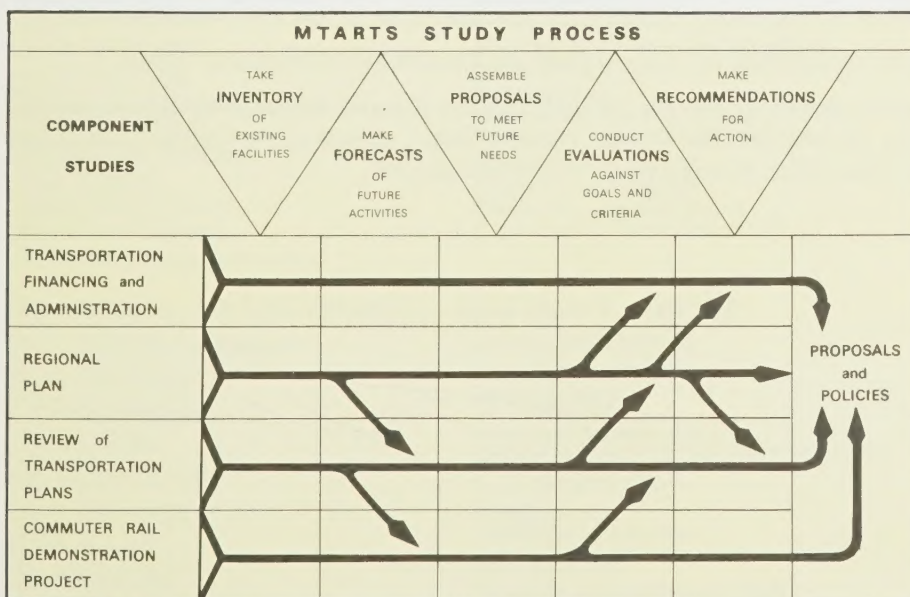
The scope and depth of the MTARTS program required that the most efficient use be made of the variety of assembled skills and facilities. Accordingly, the Study was organized into four components as described and illustrated diagrammatically here:

**Transportation Financing and Administration** — To determine arrangements for financing and organizing transportation services and facilities.

**Regional Development Plan** — To determine the emerging regional pattern; to consider the possibility of more desirable forms and patterns; and to assess the advantages of each.

**Review of Transportation Plans** — To determine future travel demand, evaluate transportation proposals, and investigate and recommend transportation modes and systems.

**Commuter Rail Demonstration Project** — To measure public acceptance of a form of service not hitherto available, and to evaluate its role and potential in the region.



## **REPORTING**

Documenting results for each stage of these investigations required two types of reports: technical reports covering procedures and techniques and having limited distribution; and formal reports containing findings and recommendations for a wider audience. This is the second of the formal reports and deals with alternative regional development concepts. Subsequent reports will discuss their implications for transportation demand and supply.

## **ORGANIZATION**

Direction of the overall Study is the responsibility of the Executive Committee assisted by the Technical Advisory and Coordinating Committee. Among the many project arms organized to review specific parts of the work is the Regional Development Subcommittee. This in turn is assisted by an advisory group of experts who have been asked to contribute their special skills and knowledge to the subcommittee's efforts.

The committee organization shown on the facing page testifies to the importance of inter-agency dependence for dealing with the intricate problems of regional growth. *Note that it lists only the membership of the two central committees and of the particular subcommittee and its advisory group.* This constitutes the MTARTS committee structure for just one part of the program — the regional development plan which is the subject of this report.

## **PREPARATION OF REPORT**

The report and much of the research are the work of a staff group of the Community Planning Branch, Department of Municipal Affairs, assisted by Professor L. O. Gertler, M.A., University of Waterloo, who undertook the assignment as a member of Acres Research and Planning Limited.

The foundations for this phase — the working out of objectives and methods — were laid by the Regional Development Advisory Group. Their guidance and advice contributed substantially to the final results. In acknowledging their assistance, it should be understood that they are not responsible for the report or its conclusions.

Sole responsibility for this rests with the Department of Municipal Affairs.

Special thanks are also due the staffs of many planning boards in the region, particularly the Metropolitan Toronto Planning Board, as well as the Ontario Department of Mines which provided photo-mechanical services.

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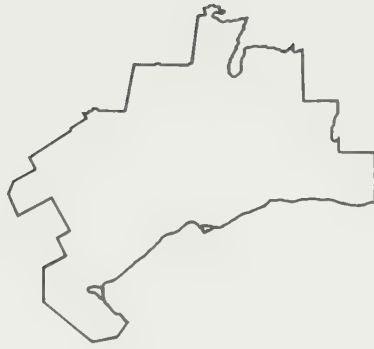
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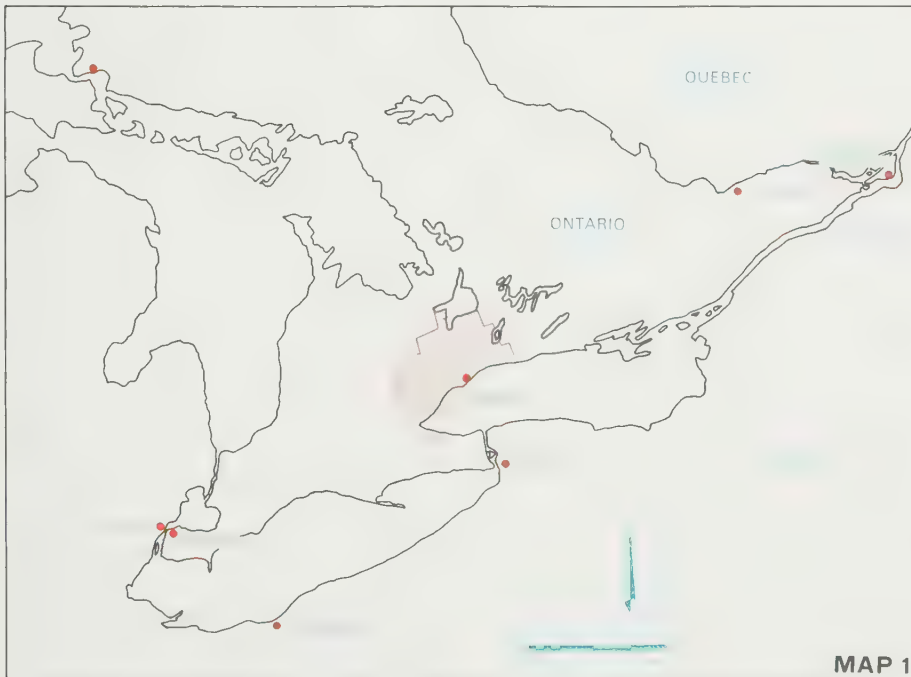


## CHAPTER 1

### THE SETTING

This report deals with the development of a region that is focussed on one of the world's great cities. It earns this designation not only by virtue of its commanding role in the affairs of Canada, but because it is one of those places on this globe that has attained cosmopolitan stature.

The region centred on Toronto has been taken as extending north to Barrie, west to Guelph and 100 miles along Lake Ontario from Hamilton to Bowmanville for a total of 3,200 square miles. Change and growth have been its keynotes. In 1951 the population was 1,695,000; in 1964, 2,800,000. In 1980 it will be in the neighbourhood of 4,000,000 and probably about 6,400,000 at the turn of this century.



MAP 1

SETTING OF REGION

With such growth, the scale of urban settlement expands. The large city becomes a regional city; the strains of transportation intensify along with many other aspects of society. It becomes increasingly difficult for the regional city to perform its unique role — to provide an attractive and coherent environment for the development and advancement of its people. Crucial to this role is the maximizing of opportunities for a wide range of employments and pleasures.

This is the problem to which the Metropolitan Toronto and Region Transportation Study has addressed itself. In evolving guide lines for a transportation policy, it has been recognized that the means of transportation are but a part of a complex fabric of regional development, and that a look at the emerging pattern of regional growth is essential to sound land use and long-term investment in transportation facilities — in short, to sound planning. This report takes that forward look by presenting a number of concepts for development to 2000 A.D.

It must be emphasized that the report is only the first step in evolving, adopting, implementing and fulfilling a regional plan. The logical next step should be an in-depth evaluation of these concepts by those provincial agencies whose activities impinge upon regional development. Included among these are the departments of Agriculture, Economics and Development, Health, Highways, Transport, Municipal Affairs, the Ontario Water Resources Commission, Ontario Housing Corporation and the Ontario Hospital Services Commission. A collective evaluation would help determine which plan, or modification thereof, should be recommended for adoption.

The report is not the product of a vast research organization labouring over many years. It has, however, been built upon practical knowledge and the considerable reservoir of regional research carried out by governments, universities and research organizations. It represents only one part — the regional development plan — of the Transportation Study.



## CHAPTER 2

### THE APPROACH

Two approaches to the task of developing a sound concept of future regional growth were considered.

One involves identifying various development concepts that have been put forward by planning theorists, and testing their suitability for the region. Their form might be Spread, Satellite, Lineal, Concentrated, Parabolic, etc. The use of this approach by planning agencies was studied.

The other approach is to examine critically the emerging development pattern in the region, to bring to light its strengths and weaknesses and potentials, and to make the changes and adjustments that appear necessary to meet the conditions of the future.

This second approach, generally, is the method adopted by this study.

The reason for this choice is important. We do not begin with a clean slate. The decisive consideration is that the future form of regional development is greatly influenced by the growth of a region of nearly 3,000,000 people, and by the various official and draft plans already prepared by the municipalities in the area — including the draft official plan for the Metropolitan Toronto Planning Area<sup>1</sup> (see Notes & References, page 69) covering one-fifth of the area and over two-thirds of its population. Such features of the regional structure as the location of the harbours, the strongest business district, the major transportation routes, the paths of residential development, must be reckoned with. *The seeds of the future form are planted in the present pattern.*

With this view of the problem, an approach stressing theoretical concepts is not the most useful. More pertinent is a method that starts with an effort to understand present conditions and where the trends are leading, and sets this against the regional objectives sought. This implies a continuing long-range process of observation and change — the examination and evaluation of conditions, the change of structural features in line with objectives, the observation of effects, further changes, and so on.



To make the method of the study work, one needs to have a picture of the present situation in terms of the use of land, population and employment; to know what changes in population and employment may be expected in various parts of the region at the adopted target year, 2000; how these will be expressed in terms of the demand for residential and industrial land; to see clearly the effect on future growth of existing long term municipal plans in the region; and to evolve definite goals which indicate the kind of region we want. The MTARTS' *Study of Regional Economic Prospects* by Larry Smith and Company was especially helpful in arriving at population and employment forecasts.

Here is how this was done:

### **1964 Land Use, Population and Employment**

Information was collected for five development sectors (page 7) adopted by the study.

The pattern of development was expressed in the 1964 Land Use map (Map 2, in Appendix) in terms of regional elements (defined on page 10).

### **2000 Population and Employment**

These forecasts were prepared on the basis of an economic study of the region. Trends in population and employment were examined and forecasts made for each of the development sectors. The economic premises relating to the growth potential of the region and its future employment composition underlie the concepts.

### **2000 Residential and Industrial Land Requirements**

Residential land requirements for the forecast population were calculated by assuming two different residential densities — a possible maximum and a minimum.

Industrial land requirements were based on the median figure of a possible range of future industrial acreage suggested by the above economic study.

### **Consolidated Municipal Plans**

Development in the region is presently guided by forty-one approved and draft official plans as well as regulatory measures prepared by the constituent municipalities.

Plans were consolidated into one map to indicate what the future form of the region might be if it continued to be shaped, in mosaic fashion, by a variety of plans concerned with local objectives (Map 3, in Appendix).

### **Trends Plan, 2000**

The consolidated municipal plans map, modified to 2000 A.D. by future residential and industrial land requirements, was called the Trends Plan inasmuch as it depicts the approximate form of the region if past trends and present policies continue. It does not show absolute limits to urban development in 2000, but outlines a range of land area necessary to accommodate the forecast population at possible variations in residential density (Maps 3 and 3A, in Appendix).

### **Regional Goals**

The goals or objectives for the region of the future were drawn up by the Department of Municipal Affairs assisted by the Regional Development Advisory Group. This group contained the varieties of background and experience essential for developing guide lines for the future form and structure of a large, complex and dynamic region.

Included in it was staff representation from the Department of Municipal Affairs, the Metropolitan Toronto Planning Board and the Metropolitan Toronto and Region Transportation Study. In addition the group comprised four individuals representing national and international experience in regional planning and urban growth, and expertise in the housing and social aspects of development.

From the deliberations of this group emerged twelve regional goals. These goals, and the definition of the criteria or conditions necessary to attain them, serve two critical purposes in the regional development study. They are the basis for the evaluation of the Trends Plan, for the identification of its advantages as well as its problems. And they form the basis for the recommended general concept or model of regional growth — the pattern to which the Goals Plans aspire.

### **Goals Plans, 2000**

The examination of the Trends Plan indicated that in certain respects it fell short of attaining the regional goals. Four different ways of overcoming the identified deficiencies, ways rooted in the conditions of the region, were worked out. These are the alternative Goals Plans for the year 2000 — I, II, III and IV.

Goals Plans I and II are alternative forms of a regional lakeshore city, developed along transportation corridors. Goals Plan III modifies this form by the introduction of an inland transportation corridor. Goals Plan IV suggests a system of new towns that are satellites to the major urban complex along the lakeshore.

### **An Approach to an Evaluation Technique**

An initial evaluation was made of both the Trends and Goals Plans. Each was rated in terms of the degree — strong, moderate or weak — of their realization of each of the regional goals. The results are summarized in chart form. The stage is set for a more rigorous analysis of alternative plans by transportation, utility, education and other government agencies.

The chapters that follow detail the step-by-step progression of the study.

*It should be noted here that the term “city” where it appears in this report is used only as a convenience to describe an urban area. No political or legal connotation is intended.*







### CHAPTER 3

## THE BASIC FRAMEWORK, 1964 AND 2000

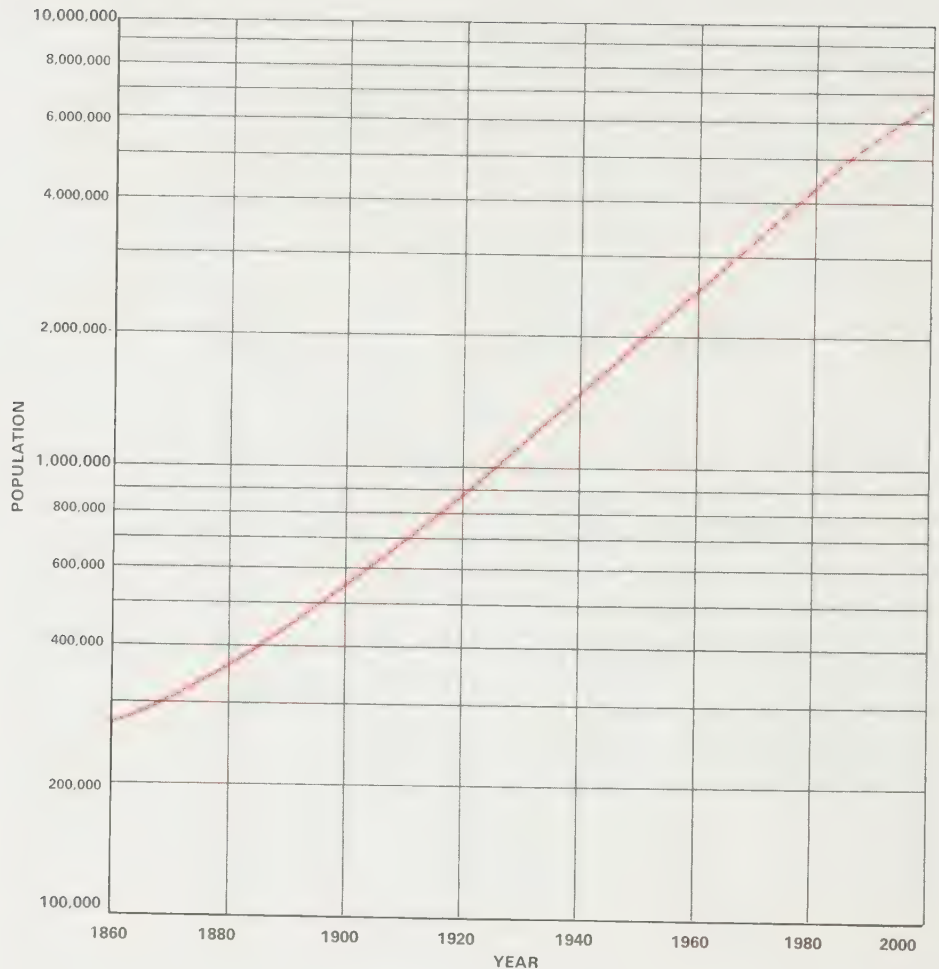
### REGIONAL CHANGE AND GROWTH

Population and employment at the base date of 1964 and the target date of 2000 are shown, by sector, in Tables 1 and 2. Each shows a rise by about 130%: population from 2,799,600 to 6,430,000 and employment from 1,015,500 to 2,330,000. The forecasted overall annual rate of population increase is 2.3% compared to a previous thirty-three year annual average of 2.8%.



DEVELOPMENT SECTORS

MAP 4



POPULATION GROWTH

FIG. 2

The shifts among the sectors shown in the Larry Smith Study indicate future changes in the regional economic structure and the broad economic premises that underlie the 2000 plans. The sector figures shown in the tables are for the Trends Plan only. While the general trends they reflect are assumed in the various Goals Plans, there are differences in the sectoral distribution which will be shown and explained in the chapters on the Goals Plans.

The significant decline in the share of the Toronto Sector — from 72.2% of regional population to 65.5%, and from 75.8% of employment to 68.6% — is a symptom of the greater relative growth in the Guelph, Barrie and Oshawa Sectors, where both employment and population will increase three to four times within the thirty-five year period.

Underlying this shift are certain anticipated changes in the ranking and sectoral distribution of major employment categories between the present and the year 2000. The most striking change is the supplanting of manufacturing by services as the major employment category.

TABLE 1  
**POPULATION**  
**1964 AND 2000 (TRENDS PLAN)**

Sector	1964	% of Region's Population	2000	% of Region's Population
Toronto	2,020,800	72.2	4,210,000	65.5
Hamilton	415,200	14.8	990,000	15.4
Guelph	133,600	4.8	480,000 <sup>2</sup>	7.5
Barrie	120,400	4.3	380,000	5.9
Oshawa	109,600	3.9	370,000	5.7
<b>Region</b>	<b>2,799,600</b>	<b>100.0</b>	<b>6,430,000</b>	<b>100.0</b>

TABLE 2  
**EMPLOYMENT**  
**1964 AND 2000 (TRENDS PLAN)**

Sector	1964	% of Region's Employment	2000	% of Region's Employment
Toronto	769,900	75.8	1,600,000	68.6
Hamilton	146,900	14.4	360,000	15.4
Guelph	37,500	3.7	150,000 <sup>2</sup>	6.4
Barrie	21,900	2.2	95,000	4.3
Oshawa	39,300	3.9	125,000	5.3
<b>Region</b>	<b>1,015,500</b>	<b>100.0</b>	<b>2,330,000</b>	<b>100.0</b>

## SERVICES

The economic study divides the Services category into seven groups — education, health and welfare, religious organizations, motion pictures and recreation, services to business management, personal services, and miscellaneous services. Each of these has different locational biases.

Some are strongly oriented to major business centres, particularly to the Toronto centre. These include business (e.g. accounting, law) and some personal services (e.g. hotels, restaurants).

Others are more widely dispersed. These include education, health and some personal services (e.g. shoe repair shops, barber and beauty shops).

The results of the economic study indicate that in the future there will be an important change in the degree of dominance of the Toronto Sector in the provision of services. Its share of total employment will fall from 75.8% to 68.6% from 1964 to 2000, while that of the Hamilton Sector will rise from 14.4% to 15.4%. The combined rise of the other three sectors will be from 9.8% to 16.0%.

Since many of these services are related to the business centre, this rise of services beyond the Toronto Sector indicates a need for, and a strengthening of, business and cultural centres beyond the major metropolitan concentration of the region. The bias of future retail trade is in the same direction.

In another respect, however, there will be a continuation of the dominant role of the Toronto centre, and that is in the finance, insurance and real estate group that, as the *Plan for Downtown Toronto*<sup>3</sup> has shown, is heavily oriented towards the centre of Toronto. This group, which is not part of the Services category, will expand about three-fold by the year 2000 and in the process the Toronto Sector will retain its predominance in financial services.

## MANUFACTURING

While manufacturing employment as a whole will expand at a declining rate, the economic study forecasts a change in the distribution of manufacturing activities. Guelph, Barrie and Oshawa Sectors will have a rising share of manufacturing employment in the region. This movement outward will occur as well within the Toronto Sector. The same type of change is forecasted for wholesale trade.

This decentralizing tendency of manufacturing is considered a strongly-based, long-range trend explained, in summary, as follows: "Industries located in the outlying sectors have access to all the basic facilities such as transportation, communication, finance and labour forces of the metropolitan areas while being able to acquire new and large sites at a relatively lower cost and can make adequate reservations for possible expansion."<sup>4</sup> Brampton, with almost five-fold employment expansion between 1949 and 1963, is cited as the archetype of this tendency.

The two conspicuous manufacturing specializations — iron and steel in Hamilton and automobiles in Oshawa — are expected to grow substantially and to continue to dominate their respective areas.

These trends in the economic structure indicate four distinct locational needs of the major employment categories: unique services like finance in the regional centre; general services in other centres; manufacturing and wholesaling in outlying areas near transportation facilities; and certain highly specialized industrial activities at specific locations. These requirements will be reflected in the regional goals and criteria set out in Chapter 5.

## DENSITY AND LAND REQUIREMENTS

The 130% increase in the region's population between 1964 and 2000 — an addition of approximately 3,600,000 persons — will create a demand for substantial areas of new residential land, as well as for related activities. The amount of land required, obviously, will depend on future density of population.

Two approaches to this critical question of density are taken in this report.

- The Trends Plan uses gross residential density as an index, that is, the number of persons per acre of land used for housing sites and ancillary purposes — local streets, schools, shops and parks. By adopting a *density range* the plan reflects contrasting land development tendencies leading, on the one hand, to higher densities and, on the other, to lower densities than prevail today.
- In the case of the Goals Plans, the *population density* of each major residential district *is determined by the features in the regional structure* arising from the adopted regional goals.

## THE REGIONAL ELEMENTS

Employment and population forecasts and their distribution within the region provide the parameters for a year 2000 concept of regional growth. The concept itself must be expressed in terms of certain key activities or elements that determine the shape and structure of regional settlement. These elements, that in a sense will be the basic "vocabulary" of the concepts presented in this study, are:

*The Regional Centre* — the central business, civic and cultural district of Toronto that contains certain unique and specialized functions serving the entire region.



*Subregional Centres* — the centres, both within and outside the heavily urbanized parts of the region, that contain a wide range of activities — shopping, civic, entertainment, cultural, professional, personal and business — and that because of this diversity assume a special role in the subareas that they serve, e.g. central business district of Oakville.

*Major Commercial Centres* — large, compact shopping areas, e.g. Dixie Plaza.

*Major Commercial Streets* — major commercial areas that assume a lineal or strip form, e.g. Danforth Ave.

*Residential Areas* — in several categories of density ranging from high, characterized by the big apartment to low, dominated by the detached single family house; and some with a mix of all housing types.

*Industrial Areas, Noxious* — areas containing mostly industrial plants, known to create problems of air and/or water pollution, or that are in some other way objectionable; e.g., in sight, sound or vibration.

*Industrial Areas, Non-Noxious* — areas containing mostly industrial plants that have no pollution effects or that have effects normally controllable.

*Major Recreational Areas* — (i) the areas sufficiently large and accessible to serve the population from all parts of the region for day outings; (ii) the web of natural park areas based on lakes, rivers, ravines, woods and escarpment; and (iii) special interest areas, such as Pioneer Village.

*Special Uses in Open Areas* — developments such as universities and research centres that characteristically are set in large landscaped spaces.

*The Major Transportation Network* — the road, public transit, rail and other facilities serving the major traffic demands — home-work, leisure time, and commercial — within the region; airports and harbours.

The development pattern as it existed in 1964 is shown in terms of these elements in the map of 1964 Land Use (Map 2, in Appendix). The year 2000 concepts presented in this report represent variations in the size and location of these elements. Limited information made it necessary to generalize some of these elements in the Goals Plans but the essential delineation of structure is retained.





## CHAPTER 4

# THE TRENDS PLAN

### GENERAL FEATURES

The Trends Plan pictures the development pattern in 2000 as it would be if long-range municipal plans (official or draft-official plans) continue to guide the development of the region.

It also assumes that the prevailing pattern of senior government development policies will continue. At the regional level these policies are mainly permissive — two or more municipalities may establish joint planning boards; municipalities may initiate urban renewal schemes and each department and agency whether federal or provincial pursues, with varying degrees of co-ordination, its specific purposes.

The Trends Plan is shown in Maps 3 and 3A, in Appendix. Its base is the consolidated municipal plans. On this base (Map 3) is shown how the forecasted year 2000 population would be accommodated, depending on the possible variation in density of population. For clarity, Map 3A repeats these variations in land requirements.

Here is what the maps show:

*The residential land* required for the high-density assumption is almost identical to the land provided by the consolidated municipal plans, whereas there is a considerable spill-over of residential areas to meet the greater land requirements of the low density assumption.

*With industrial land*, the Trends Plan indicates only a minor modification of the consolidated map. The industrial land designated in the municipal plans was more than adequate to meet the forecasted demand derived from the *Study of Regional Economic Prospects*.

*Transportation facilities* shown in the Trends Plan indicate that regional transportation will be dominated, as it is today, by the private vehicle. Map 3 shows an extension of the expressway network presented in the proposed Official Plan of the

Metropolitan Toronto Planning Area, with an emerging commuter rail system represented by the Government of Ontario (GO Transit) service from Hamilton to Pickering.<sup>5</sup>

*The consequences of the present development pattern:* At the centre of the region is a large city, reflecting both the inward pull of its major centre just north of the harbour, and the outward thrust of development along radial roads, transit and rail lines and connecting east-west routes. Most of it is contained within a ten mile arc, from Port Credit to Guildwood, drawn from the centre of downtown Toronto at Queen and Yonge Streets.

*Beyond the arc* there are conspicuous urban extensions to the north along the path of Yonge Street—pioneer trail, main street, and the modern city's most influential artery; and to the west in the direction of Ontario's "... rich agriculture and close mesh of flourishing urban centres."<sup>6</sup> East and southwest beyond the arc along the lakeshore transportation route, the present tendency of originally separate communities to merge with Toronto at the centre, and Oshawa and Hamilton at each end, has become more pronounced and a major feature of the regional pattern.

*The metropolitan culture* spreads along the lakeshore axis, but the existing centres of specialized activity persist. Steel at Hamilton; automobiles (or their end-of-century equivalent) at Oshawa and Oakville; harbours at Toronto, Hamilton and Port Credit; and industrial research at Burlington and Toronto Township become the basis of substantial new growth. On the northwest periphery of the region the centres based on the Grand River watershed (Kitchener, Waterloo, Guelph, Preston and Galt) become increasingly integrated into a single urban complex. This new entity becomes highly self-sufficient but, because of its increased size and diversity, contacts with the lakeshore complex increase.

*Manufacturing and wholesaling* establishments are widely dispersed along rail and expressways reflecting the dominance of light consumer goods' firms that can locate satisfactorily at many points along the routes to their markets.

*Residential development* tends to be formless, although some new communities emerge—in the sense of areas of interaction with separate identities—particularly where this is encouraged by the physical form and the service pattern. The dominant apartment area up to eight miles from the centre of Toronto tends to intensify towards the centre, reflecting the appeal of the core to the young. It also underscores the persisting demographic fact that the majority of households within five miles of the Toronto centre consist of childless families or non-family groups. At the same time the substantial demand for small housing units throughout the region will result in a wide dispersion of apartment groups.<sup>7</sup>

*Commercial development* outside the region's major centre takes the form of highly competitive activity to meet the retail and service demands of burgeoning residential areas. As a consequence there are a large number of commercial areas, compact or lineal in shape—some exclusively retail and others moving towards subregional diversity—characterized by a considerable variation in size, quality and appeal. The lack of a clear-cut policy to foster stable centres of the subregional type affects both the quality and range of private and public investment. It produces an overall situation of flux and uncertainty in the service structure which is echoed in the underlying community structure.



*Preserved in their natural state* are the ravines and river valleys that punctuate the watershed of the Lake, but these are increasingly dwarfed by the massiveness of urban development. Much of the land close to the lakeshore from Oshawa to Hamilton is urbanized. Within the Metropolitan Toronto Planning Area a continuous waterfront parks system emerges, but this is not carried through along the remaining fifty miles of lakefront. The open countryside recedes as built-up limits extend from six to twelve miles north of Highway 401.

## THE RANGE OF RESIDENTIAL DENSITIES

The range of gross residential density (see page 10) in the Trends Plan is from an average of 29.9 to 13 persons per acre of newly developed land.

*The upper limit* is derived from the proposed Official Plan of the Metropolitan Toronto Planning Area which assumes the average gross residential density at the end of the planning period to be 32 persons per acre within the corporate limits of Metropolitan Toronto and 27 persons per acre for the entire Planning Area. Implicit in the adoption of this density for the entire region is the prospect that density differences within the urbanized parts of the region will tend to narrow.

*The lower limit* is derived from the possible minimum density forecast by the *Study of Regional Economic Prospects*. It in turn was based on a number of studies of land required for residential areas, present and past, in a cross-section of existing large cities. This is "modified in light of the MTARTS land usage patterns and densities where known, and our judgements as to the type of future urban development likely to take place within the . . . study area as indicated by past experience."<sup>8</sup>

Maps 3 and 3A, in Appendix show the amount of new residential land required to accommodate the 2000 forecast population increase over 1964 of 3,630,000 (making a total of 6,430,000). The consequences of this growth are indicated for both ends of the density range. Either prospect—or some density in between—is entirely possible under the guiding assumptions of the Trends Plan which are a continuation of the prevailing government development policies and the lack of a region-wide growth concept.

In the case of the higher density it is assumed that 20% of the population increment in the Metropolitan Toronto Planning Area (15% in the rest of the study area) will be accommodated in the rebuilt, renewed, or infilled parts of the built-up area.

Each of these density range limits represents a different view of the future:

*The high density* reflects the judgement that the marked increase in the rate of new higher density housing construction of the past fifteen years will continue and become characteristic of the period to 2000 A.D.

Since 1949 there has been a dramatic change in the composition of new housing in Ontario. Single detached housing decreased from over 92% of the Ontario total yearly dwelling unit completions to 49% in 1965, while apartment, row and other multiple-type housing increased from 8% to 51%.<sup>9</sup>

This trend appears to be more pronounced in the study region than in the rest of Ontario and is a continent-wide phenomenon. (Even in Los Angeles, the epitome of "spread city", apartments and other multiple-type housing increased from about one-third of new residential construction to three-quarters in the twenty-year period from 1941 to 1962.)<sup>10</sup> In development it is characterized by projects that are a

familiar and accepted part of the contemporary style of living — Yorkwoods Village, Don Valley Woods, Flemington Park and so on.

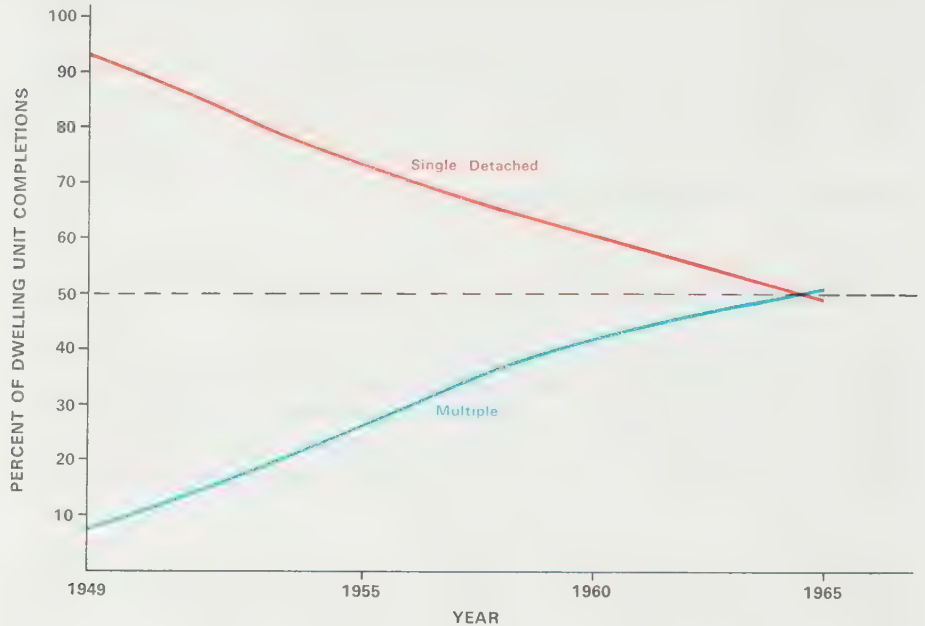


FIG. 3

### COMPOSITION OF NEW HOUSING IN ONTARIO

*The lower end of the density range represents the tendency towards higher standards of residential space and supporting facilities of schools and shopping. It expresses the kind of spread-out development we could have if present urges towards the comfortable, free-standing house on a large landscaped lot becomes more attainable.*

### LAND REQUIREMENTS

The 2000 Trends Plan's land requirements in the five development sectors are shown in Table 3. It is clear from these figures and the Trends Plan map that residential density will make an appreciable difference in the areal extent and form of the Plan.

The higher density version will require an addition of 100,000 gross residential acres to the 123,000 gross residential acreage of 1964. But the addition at the lower density limit will be 280,000 acres — 25% more than the region's total built-up area (residential and all other uses) in 1964.

TABLE 3  
POPULATION & EMPLOYMENT, INDUSTRIAL & RESIDENTIAL AREAS  
2000 (TRENDS PLAN)

Sector	Population	Employment	Industrial	Residential Area (gross acres)	
			Area (gross acres)	High Density Assumption	Low Density Assumption
Toronto	4,210,000	1,600,000	82,300	148,300	247,800
Hamilton	990,000	360,000	12,800	33,100	61,300
Guelph <sup>2</sup>	480,000	150,000	5,800	15,600	31,400
Barrie	380,000	95,000	3,500	13,400	29,800
Oshawa	370,000	125,000	5,600	12,700	32,600
Region	6,430,000	2,330,000	110,000	223,100	402,900

The overall population density (ratio of total population to total built-up area) is a rough index of the intensity of urban land development. *It is 10,000 persons per square mile at the upper limit and 7,000 at the lower, compared with 8,200 persons per square mile in the developed parts of the region in 1964.*

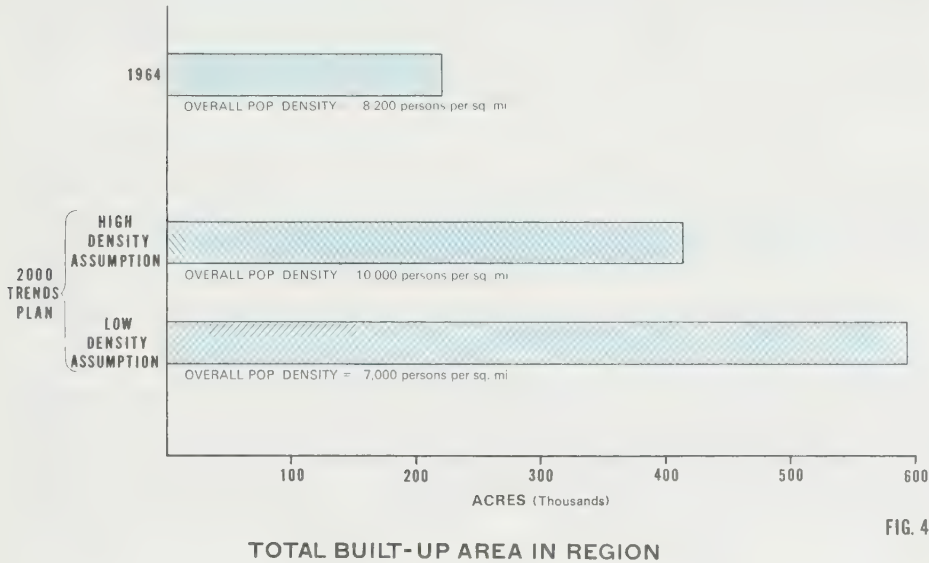


FIG. 4

The location of the 180,000 acres of residential land above the high density requirement was determined by a number of guidelines that are consistent with the trends character of the concept:

- there will be no shift in the forecast sector population;
- the directions of growth indicated by the consolidated municipal plans will be continued; and
- new developed areas will be added to established urban communities, and in proportion to their present size.

Maps 3 and 3A, in Appendix, show some of the consequences of low density residential development and the differences between the two alternative tendencies. Examples:

In the low density version there is a solid belt of urban development from Hamilton to Oshawa. It extends further away from the Lake so that some inland areas between Ajax and Port Credit are beyond economic limits of the lake disposal systems . . . All of the tender fruit area in Saltfleet Township is converted to urban uses . . . Hamilton development extends above the escarpment to a depth of about a mile and a half into Glanford Township . . . The twenty-eight square mile wedge of farmland between the Credit River and Toronto International Airport is fully developed, joining Port Credit to Brampton . . . Richmond Hill development broadens out and changes from its present high density form of limited urbanization along Highway 11, to a substantial area, eight miles wide, and extending north another two miles beyond its present limits towards Aurora . . . Newmarket and Aurora merge . . . Markham is enveloped . . . Whitby, Oshawa, and Bowmanville become a single urbanized area . . . Guelph's area is doubled over 1964, and Barrie's tripled, compared to 20% and 30% at the high density assumption . . . The thrust north towards Lake Simcoe, that is still quite limited in the high density form, becomes a major feature of the low density form.

The Trends Plan, in its high or low density form, expresses development probabilities in a uniform pattern. No change in the present degree of urban scatter is shown — an assumption consistent with the trends approach.

Since the formation of the Metropolitan Toronto Corporation, an orderly accretion on the development fringe has been achieved, not only by zoning, but by the informal control of utilities management. A sequence of development has taken place that produces the greatest servicing economies and this policy has, to a degree, been followed by other major urban communities.

With the enlargement of the scale of development, it may become increasingly difficult to retain this same degree of centralization of policy for the utilities and services that support development. Lack of coordination towards accepted regional goals could result in a series of unilateral actions by public agencies of all kinds which will have the effect of a wider dispersion of settled areas than is indicated by the Trends Plan. All aspects of the region's service structure—notably transportation—will be affected.

The approach of this study to the question of future residential density has been manifestly cautious. *It is not implied that future development will be at one extreme or the other: it could be anywhere within the range.* Yet it was considered important, in the context of a regional transportation study concerned with the traffic effects of differences in the shape and spread of development, to indicate the different directions in which present trends might lead.

## RESIDENTIAL PREDOMINANCE

In a working paper for MTARTS on future land requirements, emphasis has been placed on the forces that will generate a relative expansion in certain non-residential areas, particularly the extensive institutional, recreational, and suburban shopping developments.<sup>11</sup> The same phenomenon was stressed in a recent international study of urban space needs in Scandinavian countries, in which “the real reason for the increase of the urbanized area per person” was seen to be “the improved living standard.”<sup>12</sup>

The paper pointed out the historical trend to a declining average density, as illustrated by the experience of the New York Metropolitan Region. Here the overall population density fell from 64,000 persons per square mile in 1860 to 20,600 in 1940, and 13,500 in 1954. It asserts that an overall density of 8,000 persons per square mile is the maximum acceptable overall density in the period ahead. This is “only slightly below the average presently found within the city limits of the largest cities of Canada, the United States of America and West Germany”.

While this point of view has been recognized through the “density range”, it should be pointed out that the plunge in overall population density that is foreseen has some definite limits in practice:

- First, it is generally appreciated that, in the nature of things, the historical trend to decreasing overall population density cannot continue indefinitely. At some point it must level off.
- Second, and most important, the predominance of residential land would require an extremely high rate of increase in land consumed by non-residential uses (those sensitive to rising living standards) to affect overall population density significantly.



For example, within the Metropolitan Toronto Planning Area (one fifth of the study area and about 70% of its population), residential land was 51.1% of total used land in 1963 (excluding agricultural and vacant land), and the proposed Official Plan of the Metropolitan Toronto Planning Area forecasts a slight rise to 51.6%. The proportions of the other categories, for 1963 and as designated in the proposed Official Plan, are shown in Table 4.

TABLE 4

**1963 AND DESIGNATED LAND USE AREAS\*  
METROPOLITAN TORONTO PLANNING AREA (M.T.P.A.)**

**1963 LAND USE**

	Residential	Industrial	Commercial	Open Space	Institutional	Transp. & Utilities	Total
Metro Toronto	59.0%	9.2%	2.7%	17.1%	1.4%	10.6%	100%
Fringe Areas	36.0	6.1	0.5	37.8	0.2	19.3	100
M.T.P.A.	51.1%	8.2%	1.9%	24.2%	1.0%	13.6%	100%

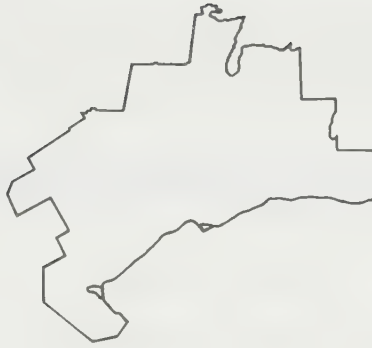
**DESIGNATED LAND USE**

	Residential	Industrial	Commercial	Open Space	Institutional	Transp. & Utilities	Total
Metro Toronto	56.7%	18.4%	2.9%	12.1%	1.9%	8.0%	100%
Fringe Areas	44.4	21.0	0.8	20.6	0.4	12.7	100
M.T.P.A.	51.6%	19.4%	2.0%	15.7%	1.3%	10.0%	100%

\*as percentage of total area excluding agricultural and vacant land.

It can be seen from these figures that a relatively large increase in any one category will have a modest effect on overall population density. For example, a 50% increase in "open space" (constituting 15.7% of the total in the proposed Official Plan) would result in only a 7.3% decrease in the overall population density of the Plan. A similar increase in "institutional" space (constituting 1.3% of the total) would produce an overall population density decrease of less than 1%. This factor of residential predominance, present today and continued into the future, will minimize the effect of changes in those non-residential uses that respond to rising living standards.





## CHAPTER 5

### THE REGIONAL GOALS

Goals for the development of a region are concerned with the primary, inescapable question: “What kind of a region do we want?” They must encompass those aspects of regional life that shape the form and structure of development: the location and relationship of major activities. In response to this question, the Regional Development Advisory Group helped set out twelve goals within the following framework:

**ECONOMIC STRUCTURE** *as determined by the locational needs of major economic activities*

**LAND** *as enjoyable landscape and as the basis for agriculture*

**ENVIRONMENT**, *including the atmosphere, water and the pattern of local communities*

**ACCESSIBILITY** *to specialized services and facilities, and between major functional areas*

**COST** *of transportation and other essential public services*

**CHANGE** *in technology, in the composition of population and in social trends.*

The goals provide a kind of yardstick or evaluating instrument. To be used effectively in this way, it is necessary that for each goal, a criterion or set of criteria be developed that defines the conditions which in each case must be satisfied to attain the particular goal. For example, developing in accordance with the economy of the region requires some knowledge of the major features of the economy, just as concern for the use of good farm land depends mainly on knowing the capability rating of the region's soil.

Not all goals lend themselves to interpretation and application with the same degree of precision. There remains an area of judgement. For each goal, however, an attempt has been made, within the limits of time and staff, to assemble the information and standards that form the basis of relevant criteria.

The results for each goal, grouped under their appropriate headings, are summarized here:

## REGIONAL GOALS

### ECONOMIC STRUCTURE<sup>13</sup>

#### GOAL

- 1 To develop in a manner consistent with the locational and space requirements of the region's major economic activities**

#### CRITERIA

*Providing scope for:*

- the regional centre-oriented activities — interlocking bank, insurance, investment, legal and accounting activities, etc.
- service activities — commercial, community, cultural and recreational, professional, etc. — oriented to subregional centres
- decentralizing manufacturing activities grouped along major highway and rail routes
- specialized activities with specific locational requirements — steel industry, major airports, etc.

### LAND<sup>14</sup>

#### GOAL

- 2 To preserve the unique attributes of the regional landscape**

#### CRITERIA

- Preserving and extending recreational access, use and enjoyment of Lake Ontario
- Making lakes, streams, valleys, wooded areas and the Niagara Escarpment permanent and positive features
- Developing in a manner that is sensitive to the aesthetic and environmental value of the surrounding farmland, and to its productive use

#### GOAL

- 3 To minimize the urban use of productive agricultural land**

#### CRITERION

- Guiding urban development, where economically feasible, to agricultural land of the lowest possible productivity, in accordance with the land capability rating

### ENVIRONMENT<sup>15</sup>

#### GOAL

- 4 To minimize the pollution of water and the atmosphere**

#### CRITERIA

- Developing at a scale and in a pattern that facilitates sewage treatment at a limited number of major plants at Lake Ontario
- Locating noxious industrial plants, where feasible, to minimize effects on adjacent land uses, e.g. to the east of residential development in accordance with the westerly bias of wind origins
- Planning a settlement pattern that is “porous” enough to permit dispersal of pollutants, and that keeps automobile traffic congestion to a minimum



## GOAL

### **5 To facilitate and maintain a pattern of local communities**

#### CRITERION

- Identifying and strengthening existing community structure and promoting growth in the form of major urban communities related to subregional centres

## **ACCESSIBILITY<sup>16</sup>**

## GOAL

### **6 To minimize time-distance for the essential population movements between major functional areas**

#### CRITERIA

*Providing optimum accessibility by:*

- locating services, shopping and offices in a system of centres (regional, subregional and others) located on or close to the regional or distributary transportation network, on which time-distance is reduced to the technological minimum
- grouping manufacturing, warehousing and terminals along the regional expressway and rail network
- linking residential areas by local and district distributors to the centres with which they are associated, to the regional expressway network, and to the stations of the public transportation systems
- locating recreational and community facilities near transportation nodes, homes near major attractive landform features, and residential communities so that they are accessible to the more distant recreational hinterland without fatiguing in-city travel

## GOAL

### **7 To maximize opportunities for using specialized services and facilities**

#### CRITERION

- Locating highly specialized facilities; major educational facilities, concert halls, major hotels, specialized hospitals, central reference libraries, etc. close to transportation nodes

## **COST<sup>17</sup>**

## GOAL

### **8 To minimize the cost of moving goods within the region**

#### CRITERIA

- Locating terminal facilities (harbour, freight yard and truck terminals), warehousing and manufacturing areas close to the regional expressway and rail network
- Grouping interlinked industries
- Grouping retail facilities in centres to facilitate wholesale to retail distribution

## GOAL

### **9 To minimize the cost of essential public services**

#### CRITERIA

- Providing a scale of services (sewerage and water) large enough to achieve economies at major sources of water supply and at sewage discharge outfalls
- Distributing major urban functions in a pattern that optimizes the balance between transportation demand and capacity on road and rail networks; and that approximates two-way peak loads on major transportation lines
- Distributing residential population and service and employment centres as to permit use of public transit facilities and to prevent excessive vehicular travel

## CHANGE<sup>18</sup>

## GOAL

### **10 To develop in a manner consistent with the needs arising from long-term population trends, particularly future growth and changes in age, household size and composition**

#### CRITERIA

*Implementing a residential structure that provides:*

- for expanding demand for one- and two-person households, for the aged and particularly for the rapidly increasing 20 to 29 age group, in higher density housing forms, near the regional and subregional centres
- for the larger families at a variety of locations, housing forms and densities

## GOAL

### **11 To develop in a manner consistent with emerging and probable future technological innovations, i.e. facilitates, adjusts to, and receives the benefits of such possibilities**

#### CRITERIA

- Assuring that development is consistent with new opportunities for significant reductions in time-distance within the region, either by changes in present modes, or the introduction of new transportation modes
- Making positive use of future increases in computing and telecommunications capacity to achieve greater flexibility in the location of homes and different kinds of work places
- Providing a structure that reflects needs and opportunities for increasing economies of scale in production and distribution, e.g. resulting concentrations of staffs, requiring increasing accessibility, at nodes and along transportation routes

## GOAL

- 12 To develop in a manner consistent with the needs arising from social changes, based on future economic and technological developments, e.g. changing patterns of leisure**

## CRITERIA

*Assuring that development is consistent with:*

- increasing preoccupation with leisure activities (both in and out of cities) due to increases in income and leisure time
- a growing tendency to continuing formal education with opportunities and complexes distributed throughout the region
- increasing prominence of universities as teaching and research centres in the urban scene, requiring good access and the back-up of a suitable environment
- a bias to multiple form of housing near centres for increasing number of households containing two workers (due to increased educational and career opportunities for women, revolution in birth control, etc.)
- a relative increase in the numbers seeking permanent country residence, or second residences in the countryside, due to increased income-leisure, more flexible working schedules and improvements in mobility and telecommunications

The goals and the criteria are complementary: the source of interrelated principles guiding the design of the region's development. This does not suggest that all can be fully attained. Designing a region, like designing anything — a house, a car, a sofa — is a process of striving for an ideal which is seldom fully attained, only approximated.

The house that from a visual point of view is a great success, might in an auditory sense be a failure: there may be no escape from the television. In the same way, the planning of large-scale regional development involves reconciling and balancing diverse objectives in circumstances that are much more complex.

## FROM REGIONAL GOALS TO REGIONAL CITY

Since the selected goals are complementary, it is possible to synthesize them into a coherent definition of what we seek. From the regional goals we can describe a regional city — in a developmental and not a political sense — with the following characteristics:

- A regional centre containing the most specialized activities of the region — business, cultural and civic — highly accessible to all parts of the developed region, making these activities available to all.
- Subregional centres providing general services of considerable diversity close to residential communities that form distinct urban entities.
- Work places distributed to meet four main requirements of the regional economy: activities oriented to a regional centre; activities oriented to sub-regional centres; activities, such as relatively “foot-loose” manufacturing, oriented to the regional expressway network; and activities such as a steel complex, with highly specialized locational needs.
- A development form that takes maximum advantage of the natural landscape endowments of the region — the dominant fact of Lake Ontario, other lakes, streams, ravines, wooded areas, hills and the Niagara Escarpment; and which minimizes the use of productive farmland.
- A development form that permits the most rational and economic basis of providing public services.
- A form that is consistent with demographic, social and technological trends with their bias towards increased mobility, greater flexibility in the location of homes and workplaces, larger production and administrative units, multiple type housing forms, education and increasing affluence with attendant effects on leisure and housing.
- All of which is tied together by a transportation system that is geared to a high level of accessibility from residential communities to major locations of work, service and leisure activities, making available the benefits of the regional city to its entire area.

This is the general concept, the adopted model, that will be compared with the Trends Plan and that will guide the formulation of the Goals Plans.





## CHAPTER 6

### EVALUATING THE TRENDS PLAN

While the Trends Plan is basically a composite of metropolitan and local plans (and as such cannot be considered a concept of regional growth) its examination in the light of regional goals is important. It is an indication of where the region is headed *if a concept*, developed in the light of clear objectives and of the problems and potentials of the entire region, *is not adopted and applied*.

The Trends Plan has been examined in detail in the light of each regional goal and of the criteria and general concept emerging from the set of regional goals. As a result of this analysis certain flaws have been identified. These will be presented with a broad brush, taking care to fill in any detail that serves to illuminate a basic point.

The principles and concept outlined in Chapter 5 may be summarized in three words — *Concentration, Integration, Decentralization*.

— *Concentration* in the regional centre of high powered and unique facilities — from the computer complex to the gourmet restaurant — that depend on the widest possible service area;

— *Integration* between the major parts of the region, particularly with the regional centre so that the services of the centre may be available to all who want them;

— *Decentralization* of general services — both private and public — into other centres (called subregional) that become the business, cultural and civic focal points of the component communities of a multi-million population region.

Implicit in this concept is a philosophy, namely that the historic role of the regional city is to be a vehicle for developing and making available opportunities for the individual citizen.

The comments that follow relate to each of the broad features of regional development (Chapter 5) into which the goals are grouped — economic structure, land, environment, accessibility, cost of public services, and change in basic trends. References to both high and low density assumptions of the Trends Plan are distinguished from those that refer to either one of the density forms.

## ECONOMIC STRUCTURE

### Land For Steel Industry Expansion

It has been noted the Trends Plan provides adequate land for the industrial expansion indicated by the *Study of Regional Economic Prospects*. Yet in one respect there appears to be insufficient land for future growth, and that is at the Hamilton steel complex.

There are three interrelated elements to be considered:

- the market for Canadian steel that has its major anchor in the regional market;
- the economics of steel production that dictates both growth to a scale of two million tons a year where economy of scale is achieved, and an upper limit of five to six million tons (setting rational limits to the major steel companies at Hamilton);
- the limited amount of suitable industrial land in the Burlington Bay area (the next major thrust in the steel industry will be by filling into the Bay).



These factors suggest it would be prudent for a 2000 plan to anticipate the need for a new site in the region, with a minimum size of 400 acres to allow for growth to the economic limit, and at a place which satisfies the major locational requirements: direct access to the lake where conditions are suitable for a harbour; proximity to rail and major highway; and to the east of major residential development where air pollution effects can be minimized.

The number of sites in the region that can meet the requirements are extremely limited. As the Trends Plan does not explicitly consider this special need it is essential that it be covered in the Goals Plan.

## Development Around the Airport

Much of the international stature of Toronto is dependent on its major airport. More international traffic originates here than in any other Canadian city. It would seem wise to allow some space for its future expansion and to permit its operation under conditions that minimize conflict with surrounding ground activities. Since the Trends Plan does not give adequate recognition to this, a crucial economic asset is jeopardized. The airport, at the high density assumption, has development on three sides. At the other extreme, because of the urbanization west to the Credit River, it is completely surrounded.

The impact of the Plan's low density assumption is particularly serious as it will introduce an entirely new relationship between the airport and residential areas in the Toronto region.

The huge wedge affected can house, under this density assumption, more than 200,000 people many of whom, because of the orientation of runways and flight paths, will be affected by sound levels above the "critical" level. The critical level has been considered to be 112 perceived decibels.<sup>19</sup> However, more recent research in the United States and England indicates the level should be lowered to allow for an increasing frequency of flights per day.<sup>20</sup>

The affected flight path areas extend ten miles from the end of runways — almost as far as the Credit River — and fan out to a mile in width taking the form literally of a dagger in the heart of any future residential community. This is also the path of greatest accident hazard in the vicinity of airports. These effects could be intensified by increased air traffic in the future and by supersonic aircraft.<sup>21</sup>

Such problems inherent in the low density form of the Trends Plan are matters of immediate policy concern because of the declared intention to provide water and sewer services to the Brampton area by building trunk lines that will traverse and that could serve the area in Toronto Township, immediately west of Toronto International Airport.



## LAND

The "land goals" in relation to regional landscape and farmland are only partly realized in the Trends Plan. The Metropolitan Toronto Waterfront Plan, although it has no official status, holds out much promise for the sound use of the land along the lake and presents a concept of almost continuous recreational use of the lake-shore. But this covers only about half of the 100-mile regional waterfront extending from Saltfleet Township to Darlington Township.

Wooded ravines and valleys are retained. While these form the basis of a natural park network, they are not in themselves — as isolated areas dominated by residential, industrial and other development — an effective regional system. Yet they are a feature that can be woven into a regional network in the Goals Plan.

It is doubtful whether the Trends Plan can satisfy the criterion, "Developing in a manner that is sensitive to the aesthetic and environmental value of the surrounding farmland, and its productive use." This is not primarily because of its form, as the agricultural land capability survey indicates a broad band of productive soil for about twelve miles north of built-up limits leaving little choice for selective urban location.<sup>22</sup> The problem arises out of the nature of land use regulation.

These have been carefully examined, and the overall judgement is that agricultural lands anywhere in the region can be readily converted to urban uses — either because of the looseness of regulations, the absence of regulations, or the permission of features such as "major commercial establishments" that can act as generators of other urban activities.

The effect of this is to place agriculture in a precarious position — to expose a large area to urban shadow effects, and to render the regional form, that can be punctured in many places, fundamentally unstable.

## ENVIRONMENT

### Subregional Centres

The Trends Plan lacks a clear and stable pattern of subregional centres. These are the centres that functionally lie between the regional centre at Toronto and the various categories of neighbourhood and community or town centres.

In a complex of six-and-a-half-million people they have a critical role to play. They are a means of bringing closer to home the wide range of services — marketing, government, community, social and recreational — that require a service base that is greater than the twenty- to twenty-five thousand persons in four or five neigh-

bourhoods served by a typical community centre, but not as great as the multimillion population of the regional centre that has both national and international roots.

This is the centre that typically will contain the one-hundred-thousand rather than the three-hundred-thousand square-foot department store. It is the natural locus for regional library branches, providing every 100,000 of the population with "the full range of bibliographical, reference and cultural service"<sup>23</sup>; and for community colleges serving populations of not less than 80,000.





The professional man — engineer, architect, accountant — whose practice is not neighbourhood-oriented will wish to locate there. It is a natural seat of local government, or at least for the location of decentralized government services.

Because of all these things, the subregional centre can play an important psychological role in sustaining a link between the individual and his community. It is close enough for personal access and identification; big and diverse enough to provide material satisfaction and fitting symbols for local pride.

To perform its role effectively the subregional centre should be at a transportation node, that would act as the hinge between the centre and its service area, and between the entire subregional complex and other parts of the region including the Toronto centre.

While the Trends Plan contains subregional centres, they are not given the strategic role they must play in the regional city. In spirit, it reflects a policy that merely permits the development of diversified subcentres linked by transportation to residential areas. In practice, the permissive approach leads to conditions of overlapping service that prevent the emergence of strong, stable and fully-rounded subregional centres as well as to conspicuous gaps in the structure of centres.

This is demonstrated by the accompanying map (Map 5) of hypothetical service areas for subregional centres identified in the Trends Plan. The service areas are described by circles with radii of five miles as an approximate range of influence.<sup>24</sup> These are not the actual service limits, but hypothetical limits when traffic constraints are greatest.<sup>25</sup>



**HYPOTHETICAL SERVICE AREAS**  
(of Trends Plan subregional centres)

**MAP 5**

The resulting pattern is a maze of overlapping service areas in the central city, with a few conspicuous gaps: the Rouge River area between the Ajax and Eglinton-Victoria Park (Golden Mile) centres; the area north of Highway 401 between Highways 404 and 48; and the area on the Niagara Escarpment in Hamilton. In addition, the subregional function is split between centres north and south of the Queen Elizabeth Way at Port Credit.

The precarious structure of subregional centres in the Trends Plan has consequences that inhibit fulfilment of the regional goals. The underdevelopment of these centres will place a burden on some activities (e.g. health, education) within the regional centre, accompanied by pressure and congestion on transportation facilities focussing on the regional centre.

At the same time, this pattern limits opportunities for integrating subregional centres with transportation nodes — places where a commuter rail station is linked with a subway station, where an express stop is located, where expressways and major roads are focussed, etc. The ability of the transportation network to tie the region together is accordingly inhibited.

## Pattern of Communities

The interaction between centre and community structure has been clearly stated by Humphrey Carver, a member of the Regional Development Advisory Group:

“Our private lives in cities do not revolve around the places where we work. The focal points in the residential city must be contrived out of the interests people share as consumers, citizens and householders. These interests take physical form in the institutions that serve a community: in shops and schools and meeting-places. So the key places we are seeking, to give social structure and physical shape to the suburbs, may take the form of Town Centres.”<sup>20</sup>

While these remarks are inspired by the role of centres serving groups of neighbourhoods, they apply with equal force to the next level of centre serving groups of “towns”. Faults in the structure of subregional centres reverberate throughout the region.

## ACCESSIBILITY

### Goods Movement

There are indications that the Trends Plan, with its highly evolved expressway network, will handle the major goods movements with great efficiency. Map 6 shows the location of twelve major food distribution terminals and eleven major truck terminals. With one exception, all of these establishments are located on or close to the regional expressway network, indicating that the Plan will afford sufficient opportunity for intra-regional carriers to achieve an optimum location. Difficulties will be experienced in wholesale-to-retail distribution because of the wide dispersal of destinations within the built-up city. This could be mitigated by a firmer structure of subregional centres.



MAP 6

## RELATIONSHIP OF MAJOR TERMINALS TO EXPRESSWAYS



## **Passenger Travel**

The built-in assumption of the Trends Plan is that most of the longer distance trips within the region will be by car or some other form of private vehicle. The region will accordingly experience both the well-known advantages and limitations of this mode.

Critical from a regional point of view is the lower peak-hour capacity of highway travel compared to the potentials of other modes and the necessary limits on vehicle speed. Given these conditions, an increasing strain will be placed on the transportation system as the urban periphery expands to accommodate six and a half million people.

To maintain a high standard of accessibility as called for in the goals — accessibility from homes to a wide choice of jobs and recreational facilities — it will be necessary to extend the balance achieved between transportation modes within the central part of the region (approximately the 10-mile subway range from the regional centre) to the entire region.

From this point of view the lakeshore commuter service shown in the Trends Plan, with its frequent stops, average speed of about 35 miles per hour and limited range, must be regarded as only a start.

## **COST**

### **Public Services**

Municipal costs are an issue in the low density form of the Trends Plan. This arises from the fact that development will have a relatively spread out character. Accommodation of the 1964-2000 population increase will require 180,000 acres more than is provided in the higher density form.

This means that the ordinary costs of roads, power lines, sewer and water lines will multiply. For example, public rights-of-way in a residential area commonly account for about 25% of total area. At that rate, development in the low density form will require 70,000 acres for streets compared to 25,000 acres in the high density form. As well, construction and maintenance costs of the additional miles of streets, walks and landscaped areas will increase proportionately.

## **CHANGE**

### **Transportation Technology**

Formation of the Trends Plan by welding together metropolitan and local plans, makes it inherently insensitive to the broad trends shaping regional development in the next two generations.

Technological innovation in transportation makes this weakness particularly serious. We plan at a time when change in the direction of increased mobility and reduced time-distance is in the offing. It matters not whether the dominant mode will be the underground capsule being developed at the Massachusetts Institute of Technology to integrate inter- and intra-urban transportation, the hovercraft, the monorail, the automated highway, or just the 160 miles-per-hour train: the large and inescapable fact is that we must plan for and take advantage of the geographical shrinking of the region.<sup>27, 28</sup> The vistas opened up for heightened access to jobs and leisure will be the hallmark of the regional city of the future.





## CHAPTER 11

### A POSSIBLE EVALUATION TECHNIQUE

This chapter cannot and makes no final judgement on the regional concepts that have been presented in this report. The issues before us are so complex that they do not lend themselves to absolutes. The course adopted here has been to identify the tendency of the various Plans to express the regional goals which together approximate the regional ideal.

The method of evaluation reflects this approach: varying intensities of color are used in the accompanying chart to indicate a weak, moderate or strong realization of the regional goals.

The chart lists the twelve regional goals in order of their appearance in Chapter 5. Broad results of the evaluation stand out at a glance:

- Goals Plans I and II are the strongest; Trends Plan-Low Density Assumption, the weakest.
- Trends Plan-High Density Assumption emerges stronger than Goals Plan III, reflecting the fact that it is the regional lakeshore city that suggested the form of Goals Plan I.
- The judgement on Goals Plan IV is uncertain. Its strengths are offset by its shortcomings.

Without repeating details already covered, some indication of the bases for the judgements will clarify the relationship of the Plans to the goals. It will be helpful now to recall the criteria used in Chapter 5.

**Goals Plan I** shows a slight overall edge on Goals Plan II mainly because the Parkway Belt performs the function of delineating the edge of development. The definition of urban limits achieved in this way helps the many-sided strategy of attaining the land goals — the maintenance of both recreational-environmental assets and productive agricultural land.

**Goals Plan II**, on the other hand, has the advantage with environment goal 4, as its more dispersed pattern of cities separated by parkland and open country makes it less vulnerable to air pollution.

## AN INITIAL EVALUATION OF ALTERNATIVE PLANS

REGIONAL GOALS	ECONOMIC STRUCTURE	LAND		ENVIRONMENT		ACCESSIBILITY		COST		CHANGE		
	1	2	3	4	5	6	7	8	9	10	11	12
TRENDS PLAN (High Density Assumption)												
TRENDS PLAN (Low Density Assumption)												
GOALS PLAN I												
GOALS PLAN II												
GOALS PLAN III												
GOALS PLAN IV												

### ATTAINMENT OF REGIONAL GOALS



WEAK



MODERATE



STRONG

ONTARIO DEPARTMENT OF MUNICIPAL AFFAIRS  
COMMUNITY PLANNING BRANCH

**FIG. 5**

### REGIONAL GOALS

1. To develop in a manner consistent with the locational and space requirements of the region's major economic activities.
2. To preserve the unique attributes of the regional landscape.
3. To minimize the urban use of productive agricultural land.
4. To minimize the pollution of water and the atmosphere.
5. To facilitate and maintain a pattern of local communities.
6. To minimize time-distance for the essential population movements between major functional areas.
7. To maximize opportunities for using specialized services and facilities.
8. To minimize the cost of moving goods within the region.
9. To minimize the cost of essential public services.
10. To develop in a manner consistent with the needs arising from long term population trends, particularly future growth and changes in age, household size and composition.
11. To develop in a manner consistent with emerging and probable future technological innovations, i.e. facilitates, adjusts to, and receives the benefits of such possibilities.
12. To develop in a manner consistent with the needs arising from social changes, based on future economic and technological developments, e.g. changing patterns of leisure.

A look at the reasons for weak ratings helps clarify the method of the evaluation and brings the differences between Plans into sharper focus:

**Trends Plan-High Density Assumption** has a weak rating on land goals, because the indecisiveness of rural land use planning makes it possible to pierce the agricultural and recreational hinterland at many points.

It is weak on environment goal 5 because of the instability of its pattern of sub-regional centres and communities. These comments also apply to Trends Plan-Low Density Assumption.

**Trends Plan-Low Density Assumption** does not show up strongly on the accessibility goals because large peripheral low density areas cannot be effectively served by high-speed public transportation, and because the system of sub-regional centres and transportation nodes at the regional scale is weak.

New water and sewer trunk lines from the outer areas of the northern part of Trends Plan-Low Density Assumption (e.g. the Markham area) to treatment plants at Lake Ontario make it a high-cost pattern (goal 9).

Trends Plan-Low Density Assumption recognizes less strongly than the other Plans the rising demand for multiple forms of housing and its spread out character imposes great difficulties in attaining changing technological potentials in transportation (goals 10 and 11).

**Goals Plan III** has a weak rating on the economic structure goal because of the improbability of attracting sufficient industrial or service employment to its cities along its Parkway Belt.

The land goals will be difficult to achieve because of the pressures for development created by long sewer and water trunk lines to the Lake. The land between the northern and southern tiers of cities would tend, in nutcracker fashion, to be squeezed by the two development paths.

Goals Plan III would have even higher trunk line costs (per person served) than Trends Plan-Low Density Assumption, and hence does not conform to cost goal 9.

**Goals Plan IV**, highly dependent on Georgian Bay water which is twenty-five miles from the closest satellite city, is also weak on this point.

It is weak on land goal 3 because of the excellent agricultural land lost to urban use around Orangeville and Alliston.

This evaluation represents only one view of the relative merits of alternative plans in relation to the regional goals. The method provides a framework for developing more objective and sophisticated tests, or for achieving a consensus on a number of judgments by individuals and groups with different background and experience.

The strong "performance" of both Goals Plans I and II suggests the need for further study of these concepts to establish more certainly their contrasting strengths and weaknesses.

Of particular interest will be the comparative transportation efficiency of the two Plans. The study in this first stage indicates that a region developed along the lines of Goals Plans I or II holds out great promise.

Ultimately, the test of a Goals Plan will be the quality of life that it will make possible for the metropolitan man of the twenty-first century. He will have a wide choice of housing locations ranging from the semi-rural to the intensely urban and, in most cases, he will not have to suffer the penalty of a long and tedious journey to work.

This man can live a quiet life and find all the facilities and services he requires for his daily comfort and edification close at hand including a community college for his 18-year-old son. Or, if he is interested in grand opera or hockey he can, on any night — whether he is in Ajax or Oakville — travel to the regional centre and then home again without risking night-time highway travel.

If he has a small family he may choose one of several locations where high-rise apartments are set in a landscaped area overlooking Lake Ontario. If his family is large, he may seek out a house somewhere near the 90-mile Parkway Belt or in one of the new cities, taking advantage of the opportunity to get out into the open on a hot summer's night or to head north for a three day weekend with no more than five minutes of city driving ahead of him.

Should the resident be an executive coming to establish a branch of an international enterprise producing computer equipment, typewriters or inflatable houses, he may decide to locate his plant in one of the enlarged cities where land is relatively cheap and where there are good industrial sites within a mile of a highway and a commuter-rail-express stop station.

For his national office and sales headquarters he may find a place on the thirtieth floor of a skyscraper trade centre, accessible from all parts of the central city, across the street from the computer utilities office, close to the new Union Station and transportation terminal with its helicopter service to the International Airport and hovercraft service across the Lake to New York State.





## CHAPTER 12

### IMPLEMENTING THE REGIONAL PLAN

The central purpose of the regional development phase of MTARTS is the charting of a sound long-range development course. This is an essential foundation to both the planning of, and investment in, transportation facilities, whether considered an obligation of imaginative and responsible leadership or simply the prudent thing to do before the commitment of large capital funds.

The fashioning of a valid concept of regional development is manifestly a difficult and complex task. The progress that has been made must be regarded as tentative and subject to further study. It does indicate, however, that some forms of development have substantial advantages of economy and convenience over other forms which might result from uncoordinated development. At some point a decision must be made about what form is most advantageous.

At the same time a judgement must be made about whether, and by what means, the selected form can be achieved. For unless the means are available to shape development and redevelopment in the desired way, no plan, however well conceived, can succeed. Consideration of this matter is crucial to the success of the entire MTARTS program.

Not only must a regional plan be a good plan and capable of implementation, *it also must be available as early as possible so that all the affected agencies may have the benefit of its guiding and coordinating influence;* so that all the various elements of development and servicing may be made consistent with one another and with the general intent and purpose of the Plan.

Since private investment in development takes place within the framework of public policy and action, it too would be guided by an adopted regional plan. Thus, although this study was initiated primarily to consider transportation, such a plan would provide the same useful background and guidance for many other activities that shape the form and quality of regional environment.

Fortunately, this is a time when the Government of Ontario has given clear enunciation to the principles of regional planning and development it wishes to pursue. Two cardinal principles stated by Prime Minister Robarts in the Ontario Legislature (April 5, 1966) are of particular relevance to the problem before us.

The first is the central position in future policy of regional development plans. The Prime Minister stated that it is the *"government's role to ensure that regional land use planning is undertaken so that the regions of the province are developed according to an orderly plan which would include environmental and economic considerations"*. He made it clear that planning for transportation facilities was an integral part of regional planning.<sup>36</sup>

## **IMPLEMENTATION BY PROVINCIAL POLICIES**

The second principle is the aim of systematically relating government programs to regional objectives. *"Much of Ontario's regional development program will be accomplished by a thorough-going coordination of the programs, policies and spending of government departments and agencies."*

These principles and their administrative implications indicated by the Prime Minister throw light on the path we can tread towards the implementation of a regional plan for the large, multi-centred region of Toronto and area.

The first possibility is to explore to the limit the ways in which the established and operative government programs can, working in harmony, be a force for attaining the selected regional plan.

To illustrate the promise and relevance of this approach, provincial activities will be considered in relation to some of the key features of Goals Plans I and II.

The features of these Plans that are critical, on which all other features depend are:

- the orderly dispersion of manufacturing and service employment into the lakeshore cities;
- an express commuter rail service between Hamilton and Oshawa;
- strong subregional centres at selected locations;
- a Parkway Belt that is a second transportation corridor;
- a network of waterfront parks;
- the preservation of natural recreational areas and productive farm land outside designated development areas; and
- the initiation of large-scale urban growth at relatively small existing centres or at entirely new locations.

## **RELEVANT GOVERNMENT ACTS, AGENCIES AND POLICIES**

For each of these requirements there is a provincial policy or a combination of policies that is relevant and could exert a substantial influence. This does not imply that action at municipal and federal levels is not important — only that the leadership of the Province in certain fields is critical and that there is much potential for creative leadership within the bounds of existing statutory authority.

The Prime Minister has stated that the *"Government accepts the responsibility of guiding, encouraging and assisting the orderly and rational development of the province."* In effect, this suggests a broad provincial strategy for the distribution of

employment and population to be formulated by a series of interrelated regional development plans. The regional plan that will emerge from this study could fit into this strategy. If regarded in this manner, then the Government could influence the economics of development through such means as:

- the promotional, information, research, arrangements and branch plant services of the *Trade and Industry Branch* of the Department of Economics and Development;
- the loan policy of the *Ontario Development Corporation* relating to both working capital and initial financing for private firms;
- the strategic use of the authority of the *Ontario Water Resources Commission* to construct (or not to construct) with provincial finance, regional water supply and water pollution control facilities. This, for example, could play a significant part in establishing the economic viability of the new cities along the Parkway Belt in Goals Plan II. The *Hydro-Electric Power Commission* has similar authority for constructing power lines;
- the direct initiation of development to fulfil established government responsibilities, as illustrated by the Sheridan Park Research Community — a complex that will play an important role in the growth of a Port Credit city of 350,000 to 500,000 people by the year 2000.

The establishment of an express commuter rail service between Hamilton and Oshawa depends directly on provincial action through the application of the *Commuter Services Act* (1965). By this measure, the Minister of Highways can enter into agreements with the CN or other corporations or individuals to establish and/or operate “commuter services to serve any one or more areas in Ontario”. Funds and authority are provided to acquire the necessary land, equipment and rolling stock.

One important measure that could be taken to reinforce the selected subregional centres in the Goals Plans would be to provide the indicated high-speed commuter service and to establish the express stop stations at or near the selected locations of the centres. Such action, it is anticipated, would be critical in strengthening the growth of the subregional centres.

Other direct ways in which the Province could effect the growth of subregional centres is through grants to community halls, arenas, etc. under *The Community Centres Act*, and the siting of community colleges and universities by the departments of Education and University Affairs.<sup>37</sup>

The Parkway Belt in Goals Plans I and II could be obtained by direct provincial action through a combination of acquisition of rights-of-way for highways, for parts of the proposed commuter rail lines, and for land for a number of provincial parks of the small 20-to-30-acre type such as Sun Valley Park near Dunbarton (at the Liverpool interchange off Hwy. 401) and Waltona Park near Newcastle (at interchange 78 off Hwy. 401). Authority also exists under the *Parks Act* to acquire the waterfront parks which are an essential feature of the lake-oriented regional city.

The acquisition of flood plain land and related wooded valleys by the *Metropolitan Toronto and Region Conservation Authority* is a process, initiated and partly financed by the Province, that has already produced 14 parks in the region. The continued establishment of recreation areas will be important in the strategy of implementing a regional plan.

The *Canada Land Inventory* initiated under the Federal-Provincial A.R.D.A. program has provided the basic tool — the Agricultural Land Capability Inventory — for identifying the productive land in the region. The Province has a large leadership role to play in protecting these lands because of its general responsibilities under *The Planning Act* and its approval authority for subdivisions, official plans and zoning by-laws.

In 1966, the Minister of Municipal Affairs made a statement of government policy on urban development in rural municipalities which has the greatest relevance to the Goals Plan objective of preserving productive farm land outside designated development areas.<sup>38</sup> He set out these four guide lines:

- Year-round urban residential development should take place in municipalities that have adequate administrative organization to cope with urban problems and that are equipped and willing to provide the necessary services.
- Such development will be integrated in an existing urban community or a new urban community, developed in accordance with an official plan.
- There is reasonable assurance that an effective demand for such development exists or will exist as development proceeds.
- Appropriate land use (zoning) regulations are in force or will be in force by the time the development is ready for marketing.

The consistent application of these principles in the MTARTS region would go a long way towards achieving the rural land use objectives of the Goals Plan for both agricultural and recreational land.

There is an additional provincial responsibility affecting the regional landscape that will need to be related to the regional plan. That is the authority of the Department of Mines under *The Mining Act* to control sand and gravel removals on Crown Lands and from the beds and beaches of lakes and rivers, including the inspection of shore erosion in relation to removals.

## NEW CITIES

One of the most challenging tasks posed by Goals Plans I and II (particularly Goals Plan II) is the creation in the whole cloth of a number of substantial new cities — such as Columbus (150,000 population) and Brock (135,000) in Goals Plan II — or the achievement of a greatly accelerated rate of growth in existing centres such as Port Credit and Ajax. This task is made particularly difficult because much of the indicated growth would take place within rural municipalities and outside the jurisdiction of planning agencies equipped to deal with urban development.

The growth forces along the southern transportation corridor are strong. But the achievement of development in the right place at the right time and in the right form is a complex and demanding undertaking that will require the most careful planning.

This job has four critical elements — planning, finance, timing and administration:

- Each new city (or large scale new development added to a relatively small existing community) requires a development plan carefully worked out to meet both local and regional needs.



- Capital funds will be needed for the initial investment in basic utilities, roads and community facilities in advance of development and of the arrival of tax-paying residents who will eventually sustain the community's growth.
- Timing is another critical element for it is obvious that not all areas can be developed simultaneously.
- An administrative process needs to be set up, leading from the initial planning state through construction and the first stage of growth, to locally controlled administration when the city becomes a going concern.

Where new development occurs within an urban municipality or urban-based joint planning area, or within the jurisdiction of the Metropolitan Toronto Planning Board, these agencies would be the most logical to supervise the many-sided tasks of new city building. But where this is not the situation some other solution will have to be found.

Within the established practice of the provincial administration is an "institution" that might lend itself to the job of creating new cities. This is the Townsite Committee, an inter-departmental group under the chairmanship of the Director of the Community Planning Branch, which over the years has done the ground work — in planning, financial policy and administration — for the creation by Government initiative of new towns arising out of the development of northern resources.

The basic operating principle has been to bring together senior personnel from those departments such as Municipal Affairs, Highways, Education, Mines, Lands and Forests, which together have the statutory authority to initiate, support and, in part, provide the physical framework and community services for a new town. The Committee has been active for over 12 years and has operated with conspicuous success.

Assembling the necessary provincial functions in this way offers some interesting possibilities. For example, the creation of the new city of Columbus in East Whitby Township as proposed in Goals Plan II could be supervised by a "townsite committee" carefully constituted to represent essential functions in this way:

Department of Municipal Affairs .....	planning and municipal finance
Department of Economics and Development .....	economic base
Ontario Housing Corporation .....	housing and land assembly
Ontario Water Resources Commission .....	sewer and water services
Department of Education .....	schools and libraries
Department of Health .....	health services
Ontario Hospital Services Commission .....	hospitals
Department of Highways .....	highways and major roads

While the organizational principle involved in this suggestion is identical to that applied in the creation of northern towns, the scale of the undertaking is very different. Success of this approach would depend on more staff within the administration specifically assigned to the task.

This suggests that *normal* provincial action could materially influence development in the MTARTS region. Its use in a purposeful way to achieve a desired regional pattern involves a formidable task of coordination. Effectiveness will depend on consistent and systematic coordination among departments along the lines set out by the Prime Minister — extending from himself as Chairman of a Cabinet Committee to a Departmental Advisory Committee of senior civil servants to a Regional Advisory Board representing officials with responsibilities within the region.

To complement and extend provincial action it is essential that local, metropolitan and federal programs pull together to attain regional objectives. For example, the Land Assembly provisions of the National Housing Act, through which 1,600 acres have been assembled at Malvern (one of the designated sites for new development in Goals Plans I and II) could be a powerful instrument in creating the new urban areas along the transportation corridors. Local and metropolitan action on zoning, major roads, utilities, public transit and the location of community services could have a decisive effect on the pattern of subregional centres.

### **COORDINATION OF LOCAL AND SENIOR GOVERNMENT ROLES**

While the coordination of existing government functions could accomplish a great deal, it is only part of the answer to the problem of implementing a regional plan in an extensive, multi-municipal region. *Our society is such that a pervasive instrument like a regional plan, affecting so many areas and interests, has little chance of success unless the people affected have an opportunity to participate in its formulation, in its creative evaluation over the years and in its implementation.* By the same token planning requires a statutory base rooted in the processes of democratic government. The manner in which these principles, i.e. local participation and local democratic administration, can be embodied in the implementation of a regional plan is suggested by the form and structure of the Plan itself.

Goals Plans I and II are an attempt to achieve a high degree of integration of what have been called (in Chapter 3) "the regional elements" — the centres, residential districts, industrial areas, major recreational areas, the transportation network, etc. — while the overall concept depends on the achievement of strongly identified separate entities with richly diverse centres.

Regional concerns are interwoven with the local and are expressed in the size, location and function of cities and of subregional centres, in the orientation of local transit systems, the location of transportation corridors, the size and functions of the Parkway Belt, the use of the waterfront, etc.

The dual nature of the Goals Plans suggests, as a model, neither the supercity nor the congeries of self-contained, internally balanced urban communities — but something in between. From the point of view of implementing a regional plan, there is a need to define the elements that are crucial — the inherently regional matters — and to establish for the entire region an effective jurisdiction.

This should be done under provincial statute and with provincial participation, and can be the vehicle for the involvement of the constituent municipalities (corresponding to major parts of the regional complex) in the preparation, adoption and implementation of a regional plan.

### **POSSIBLE REGIONAL ORGANIZATIONS**

It would appear that two types of solutions are inherent in present conditions.

One approach is to fuse the present and potential functions that must operate at the large regional scale into a single regional administration.

Present functions are: *resource conservation*, including regional parks, as represented by the Metropolitan Toronto and Region Conservation Authority and the Department of Lands and Forests; *transportation*, including the operation of the experimental rail commuter service by the Department of Highways; *economic development*, the concern of a recently formed regional development council in the four-county (Halton, Peel, York and Ontario) Central Ontario Region.

Potential regional functions are *planning* for the stated broad purposes; *control of air and water pollution*; *water supply*; and *research*, the marshalling of basic data required for planning and administration of a great variety of activities — from tree nurseries to school systems — within the region.

The second possible approach is the creation of a special agency with a provincial-municipal base for the express purpose of large scale regional planning. A highly suggestive example of this is the District of the Region of Paris set up in 1961 to prepare and put into effect a plan for the year 2000 in a large district (10 times larger than the present metropolitan Paris) which includes 1,315 communes. Its specific functions are:

- to coordinate government action in the areas of planning and public improvements;
- to study the problems that arise on these subjects in the Paris region;
- to contribute financially to solving these problems; and
- to propose overall plans with a view to developing a comprehensive town and country planning policy for the Region.

Its organization includes a Board of Directors composed of local elected representatives, a General Delegation which can exercise powers delegated by many Ministries of the French Government, and a Consultative Economic and Social Council, an advisory body representing key groups in the area from business, labour, economic organizations and the professions.

Since this institution has been fashioned in response to the same kind of challenge that we face in the MTARTS region, it merits closer examination and study.<sup>39</sup>

Whatever type of solution is adopted, it must complement and extend our present means of formulating government policy both at the provincial and municipal level.

Authority and procedures are established and in operation under The Planning Act and other Acts by which individual municipalities, and groups of municipalities, may prepare, adopt and implement official plans based on the physical, social and economic conditions affecting the development of planning areas. These plans, when given provincial approval, guide all subsequent development.

Areas may be of a size and composition that would permit regional planning and provision is made for consultation with all affected government agencies before official plans are approved. However, regional plans require the full participation of both the local and provincial governments and apparently the present situation has not produced the necessary interest and participation. Only where there is a local administrative unit having authority over a large area and ample resources can a plan which might be called regional be prepared.

At the provincial level a great deal of work has been done and a considerable degree of interdepartmental cooperation developed in carrying out studies for specific purposes.

The Department of Municipal Affairs has for years been conducting land-use studies throughout the province. The Department of Highways has used this material to determine highway needs. The O.W.R.C. has had extensive engineering studies made for its guidance. The Department of Economics and Development produces reports based on studies of the economy of the various parts of the province.

The Metropolitan Toronto and Region Transportation Study is such a special study in which, because of the size of the area and the involvement of a greater number of government agencies, together with Metropolitan Toronto and other municipalities, it has been possible to come nearer to the preparation of a regional plan which considers all of the factors involved and therefore might be helpful as a basis for government decisions in fields other than transportation.

Three factors have inhibited successful regional planning under The Planning Act.

- One is the great number of small municipalities into which local government is fragmented, resulting in divided authority.
- Another is the difficulty experienced by a local planning authority in ascertaining, coordinating and applying the policies of government departments affecting various elements of development with which they respectively deal.
- The third is the fact that any cooperative effort requires strong leadership which, it would appear, can be given only by the provincial authority.

Recent studies carried out under the direction of the Department of Municipal Affairs, notably those in the Ottawa, Niagara and Peel-Halton areas, may lead the way to stronger municipal units of a size and structure more appropriate for serving as the local administrative arm of regional planning.

The establishment of the Metropolitan Toronto and Region Transportation Study and the cooperation of all the government agencies in this project give assurance that, with appropriate organization and support, the resources of all agencies can be applied to this strengthening process. This would appear to be in accordance with present government policy to assume as one of its *"broad responsibilities . . . the task of directing and coordinating the preparation and implementation of regional development plans"*.





## CHAPTER 13

### FURTHER ACTION

#### PURPOSE OF THE REPORT

As was stated, the immediate purpose of this regional development study is to provide the Metropolitan Toronto and Region Transportation Study with a forward look at the emerging pattern of regional growth and to present concepts for development to the end of the century.

In addition to this purpose, it is also a first step towards the evolution of a regional plan as a guide to the general development of the area. A plan, if supported by government policy and incorporated in local municipal plans, would be advantageous in many ways — not the least of which would be to support the implementation of the transportation recommendations growing out of the Study by maintaining a balance between the transportation facilities and the development which they serve.

*The urgency for a regional plan cannot be stressed enough. In an ever-growing region, decisions and actions requiring capital expenditure are continually being made. Many of these would be favourably affected by the adoption of (or by the intent to adopt) a regional plan.*

#### NEED FOR A REGIONAL PLAN

A regional plan based on competent study would be a *guide for both public and private development*. For example:

- a more convenient and economically serviced and aesthetically pleasing pattern of development could be achieved than would otherwise occur;
- by developing in accordance with an agreed and continuing plan, not only can harmony between its various elements be obtained but these relationships can be maintained;
- local official plans cannot be soundly based unless there is an agreed regional structure into which they can be fitted;

- public agencies such as the departments of Highways, University Affairs and Public Works, the Ontario Water Resources Commission and the Hydro-Electric Power Commission would be provided with a basis for co-ordination as to the direction and timing of large expenditures for public works;
- ministerial approvals under The Planning Act, such as the approval of official plans and plans of subdivision, would have the benefit of an agreed regional pattern;
- private investment would be assisted by having a knowledge of the publicly recognized framework in which it can operate; and
- future transportation facilities would be supported by a regional form and structure for which they were designed.

### **SUGGESTIONS FOR ACTION**

This report sets out, for the consideration of the Metropolitan Toronto and Region Transportation Study, the results to date of the research that has been carried out under its instruction on the future development of the region. It is believed that the concepts for development in the year 2000 described here are as valid as may be determined in the available time.

In dealing with so complex a problem there is naturally no absolute and final answer. The results can always be profitably tested and refined by further study. It is of utmost importance that the goals and concepts be subjected to careful scrutiny by every interested agency. It is especially desirable that they be assessed more fully as to their suitability for efficient transport systems.

Based on present results, the following action is suggested:

- All public and private agencies involved or interested in the development of the region be encouraged to comment on the report.
- A choice be made of concepts favoured for further assessment.
- A continuing program be provided so that, with the assessments and comments received, the concepts may be further tested and adjusted as necessary.

In a dynamic region, timing is of the essence. If a regional plan is contemplated it should be proceeded with as soon as possible. The consequences of delay in setting the region on a sound course might be damaging and costly.



## NOTES AND REFERENCES

1. Metropolitan Toronto Planning Area embraces the Municipality of Metropolitan Toronto; Townships of Toronto, Toronto Gore, Vaughan, Markham and Pickering; Towns of Port Credit, Streetsville, Richmond Hill and Ajax; Villages of Woodbridge, Markham, Stouffville and Pickering.
2. Year 2000 forecasts for Guelph Sector include part of enlarged City of Guelph in Puslinch Township.
3. City of Toronto Planning Board, **Plan for Downtown Toronto**, (Toronto: 1963).
4. Larry Smith and Company for Metropolitan Toronto & Region Transportation Study, **Study of Regional Economic Prospects**, (Toronto: February, 1965), p. II-32.
5. GO Transit extends to Burlington and Hamilton also, but the number of daily trains to and from Hamilton does not exceed, initially, that provided by the discontinued CN service.
6. Donald Kerr and Jacob Spelt, **The Changing Face of Toronto**, (Ottawa: Geographical Branch, Department of Mines and Technical Surveys, 1965).
7. Ibid., pp. 115-117.
8. Smith and Company, op. cit., p. IV-9.
9. D.B.S. Publication, Catalogue Number 64-002, **New Residential Construction**.
10. Victor Gruen, **The Heart of Our Cities**, (New York: Simon and Schuster, 1964), p. 267.
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    - Various urban traffic studies within the study region.
    - Metropolitan Toronto Planning Board, Report on **The Metropolitan Toronto Transportation Plan**, (Toronto: 1964).
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  17. — Official Plans of municipalities within the study region.
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  18. — City of Toronto Planning Board, **Toronto Population, Households and Families**, (unpublished report: 1964).
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- 20. — Bolt, Beranek & Newman, Inc., **Land Use Planning Relating to Aircraft Noise**, Technical Report, (October, 1964).
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- 22. **Soil Capability Classification**, op. cit.
- 23. Shaw, op. cit., pp. 76-77 and 97.
- 24. Some indication of the reality of the hypothetical service areas is suggested by the information, provided by the Yorkdale Shopping Centre management, that 52% of Yorkdale's customers originate within a radius of five miles.
- 25. — The rule-of-thumb used to determine the 5-mile range of influence was a 30-minute travel tolerance time and an average speed of 10 m.p.h.
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- 26. Humphrey Carver, **Cities in the Suburbs**, (Toronto: University of Toronto Press, 1962), p. 64.
- 27. **The Economist**, (London: March, 1966).
- 28. **The Professional Engineer and Engineering Digest**, (Toronto: May, 1966), p. 73.
- 29. The subregional centre shown as Weston on Map 7 is symbolic only. The present location of intensive business activity at Weston Road and Lawrence Avenue West is confined by the Humber River Valley and major rail lines. A possible alternative would be the area near the future interchange of Richview Expressway and the Highway 400 extension. Detailed study of alternative sites is required. The success of the Guildwood Centre would depend on a grade separated access to the centre from the Scarborough Expressway near its future northward turn east of Morningside Avenue in Borough of Scarborough.
- 30. Homer Hoyt, "Recent Distortions of the Classical Models of Urban Structure", **Land Economics**, (Madison, Wisconsin: May, 1964).
- 31. The nearest wind rose calculation is at Hanlan's Island.
- 32. De Leuw, Cather and Company, op. cit.
- 33. Department of Economics and Development, **Industrial Surveys of Ontario Municipalities**, (Toronto: 1965).
- 34. **Individual Household Aerobic Sewage Treatment Units**, Laboratory Research and Development Research by Ontario Research Foundation on behalf of C.M.H.C.

35. **An Interim Report of the Mark III Research Project**, sponsored by the National House Builders Association, with assistance from C.M.H.C., (reprint from **Habitat**, January-February, 1962).
36. **Ontario Legislature**, (Toronto: April 5, 1966), pp. 2254-2, and 2255-1. This and all other statements attributed to Prime Minister Robarts are from the above source, pp. 2254-2260.
37. References to Provincial Government functions in this chapter are based on legislation and the **1965 Directory and Guide to the Services of the Government of Ontario**, (Toronto: 1965).
38. Honourable J. W. Spooner, **Address to 1966 Annual Conference of the Association of Ontario Mayors and Reeves**, Sarnia, June 27, 1966.
39. Government of France, **France, Town and Country Environment Planning**, (New York: 1965).

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## **APPENDIX**

### **MAPS**





# LEGEND

## RESIDENTIAL

- High Density
- Medium-High Density
- Medium Density
- Low Density
- Seasonal

## INDUSTRIAL

- Non-Hazardous
- Non-Non-Hazardous

## COMMERCIAL

- Regional Centre
- Subregional Centre
- Major Commercial Centre
- Major Commercial Street

## OPEN SPACE

- Special Use
- Landform Feature
- Major Recreational

## TRANSPORTATION FACILITIES

- Airport, Rail Yard
- Railway
- Rapid Transit (Subway)
- Expressway
- Major Road



1964 LAND USE



# LEGEND

consolidated municipal plans

## RESIDENTIAL

- High Density
- Medium-High Density
- Medium Density
- Low Density
- Seasonal

## OPEN SPACE

- Special Use
- Landform Feature
- Major Recreational

## TRANSPORTATION FACILITIES

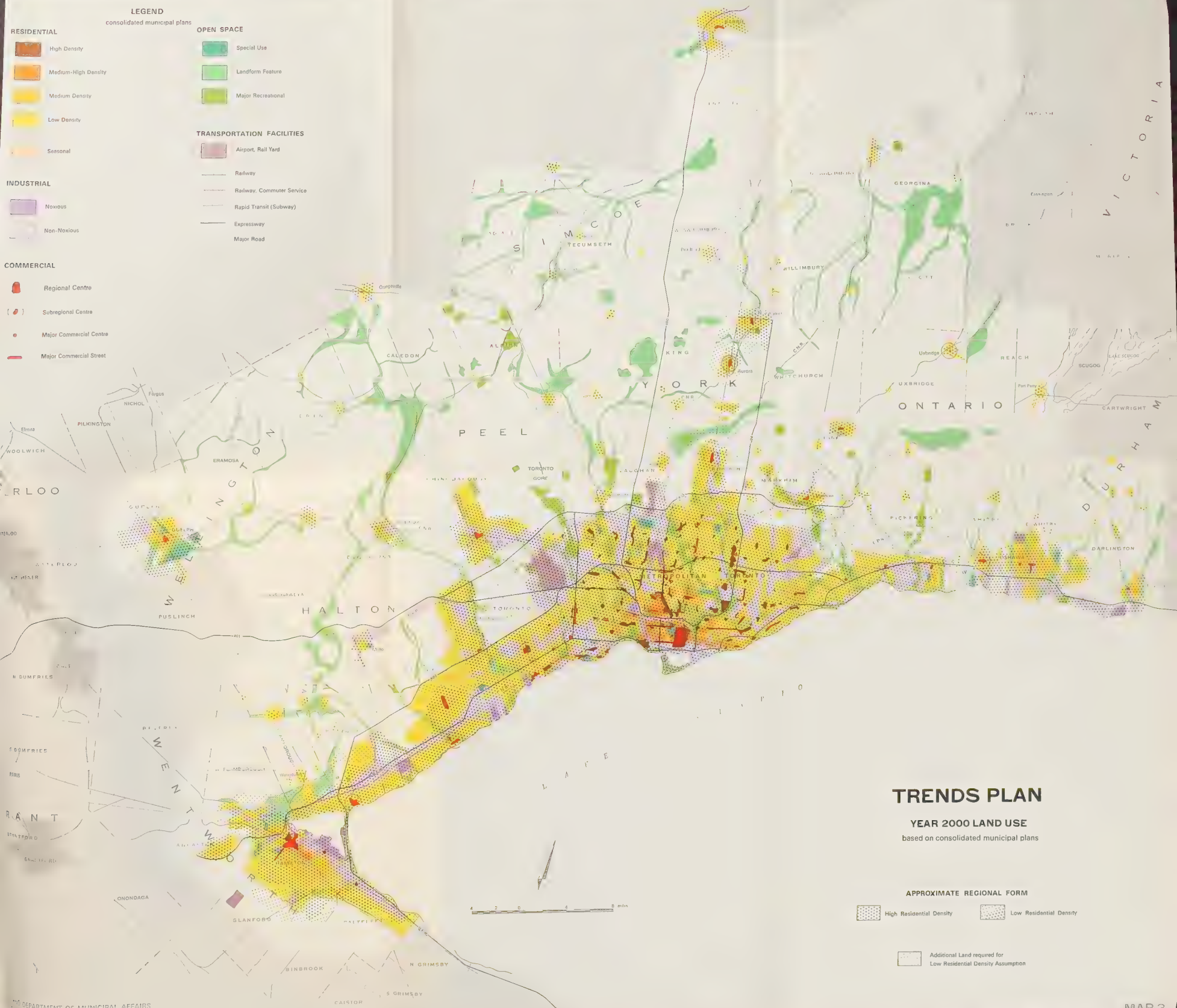
- Airport, Rail Yard
- Railway
- Railway, Commuter Service
- Rapid Transit (Subway)
- Expressway
- Major Road

## INDUSTRIAL

- Noxious
- Non-Noxious

## COMMERCIAL

- Regional Centre
- Subregional Centre
- Major Commercial Centre
- Major Commercial Street



## TRENDS PLAN

YEAR 2000 LAND USE

based on consolidated municipal plans

### APPROXIMATE REGIONAL FORM

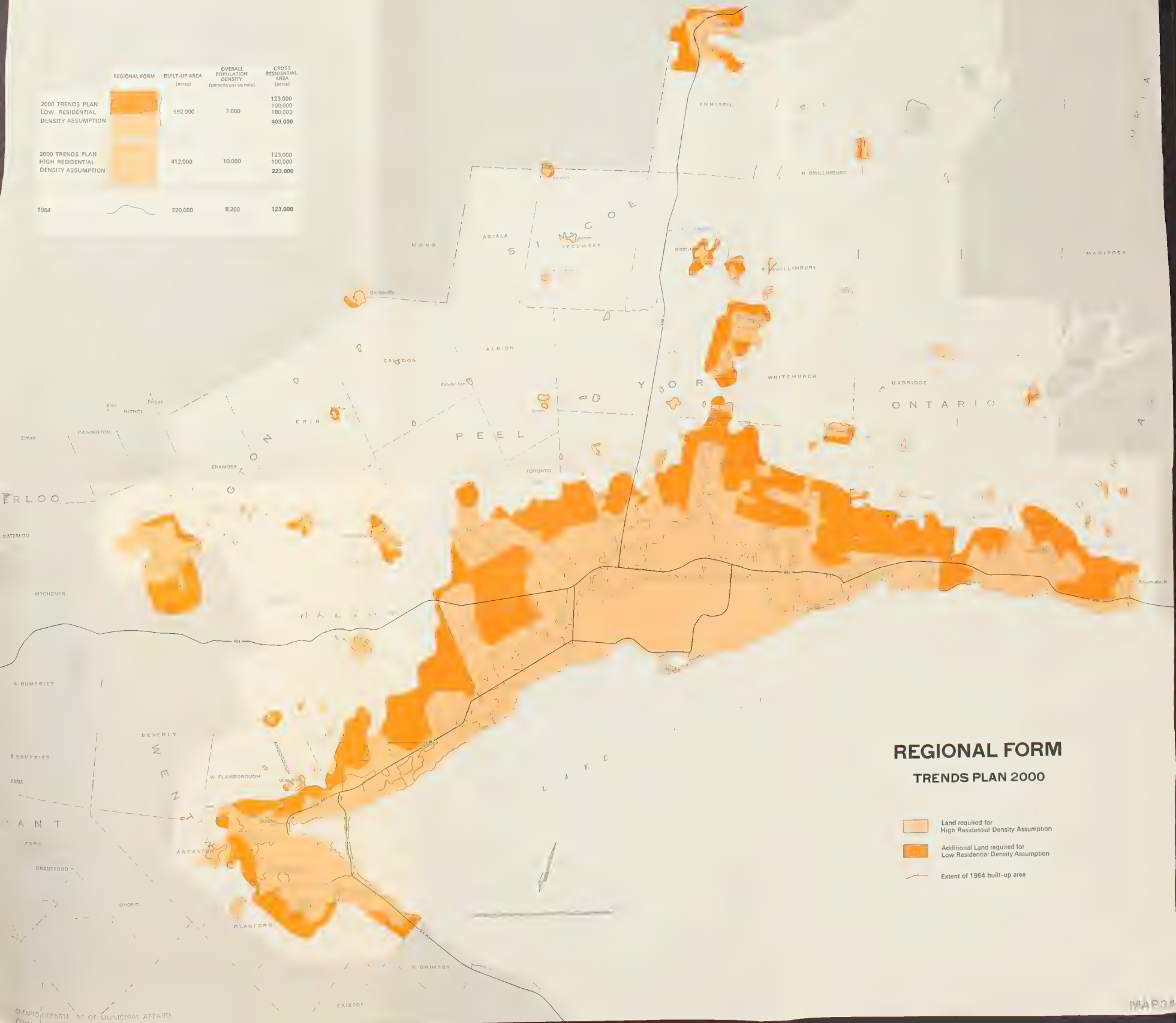
- High Residential Density
- Low Residential Density

Additional Land required for Low Residential Density Assumption





REGIONAL FORM	BUILT-UP AREA (acres)	OVERALL POPULATION DENSITY (persons per sq mile)	CROSS RESIDENTIAL AREA (acres)
2000 TRENDS PLAN LOW RESIDENTIAL DENSITY ASSUMPTION	592,000	7,000	123,000 100,000 180,000 403,000
2000 TRENDS PLAN HIGH RESIDENTIAL DENSITY ASSUMPTION	412,000	10,000	123,000 100,000 223,000
1964	220,000	8,200	123,000

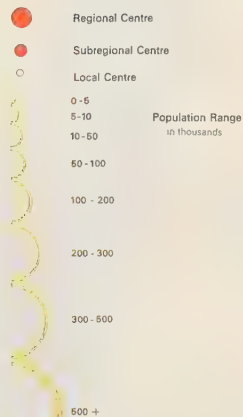


## REGIONAL FORM TRENDS PLAN 2000

- Land required for High Residential Density Assumption
- Additional Land required for Low Residential Density Assumption
- Extent of 1964 built-up area



# LEGEND



## GOALS PLAN I

2000





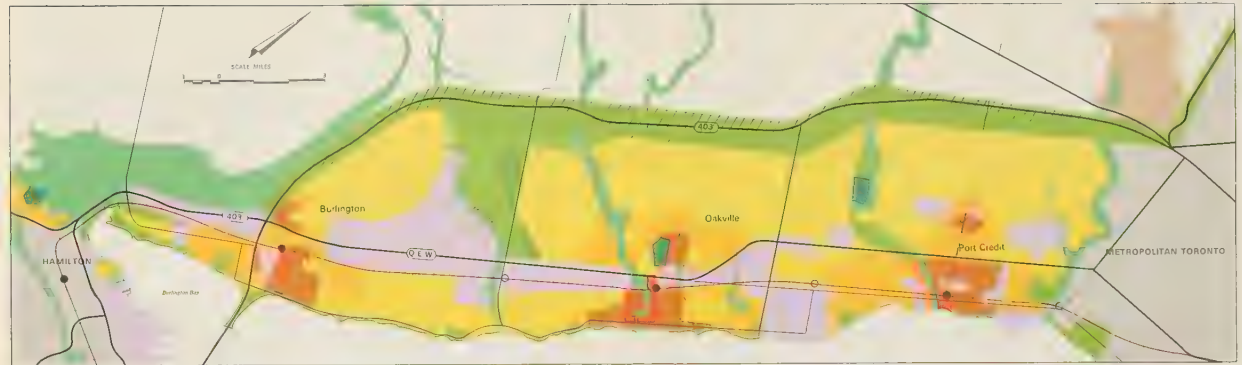


# CORRIDOR CITIES

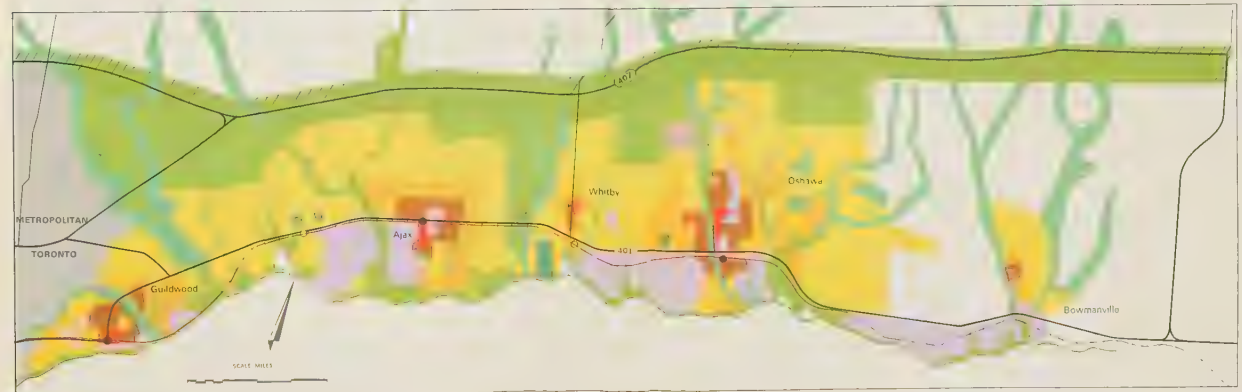
(as part of Goals Plan I)

## LEGEND

- Subregional Centre
- Community Facilities
- Local Centre
- Residential
  - 60
  - 35
  - 15
- Persons per gross acre
- Industrial
- Special Use
- Landform Feature
- Major Recreational Area
- Parkway Belt
- Airport, Rail Yard
- Railway, Commuter, High Speed
- Station (Express, Local)
- Railway
- Expressway
- Major Road



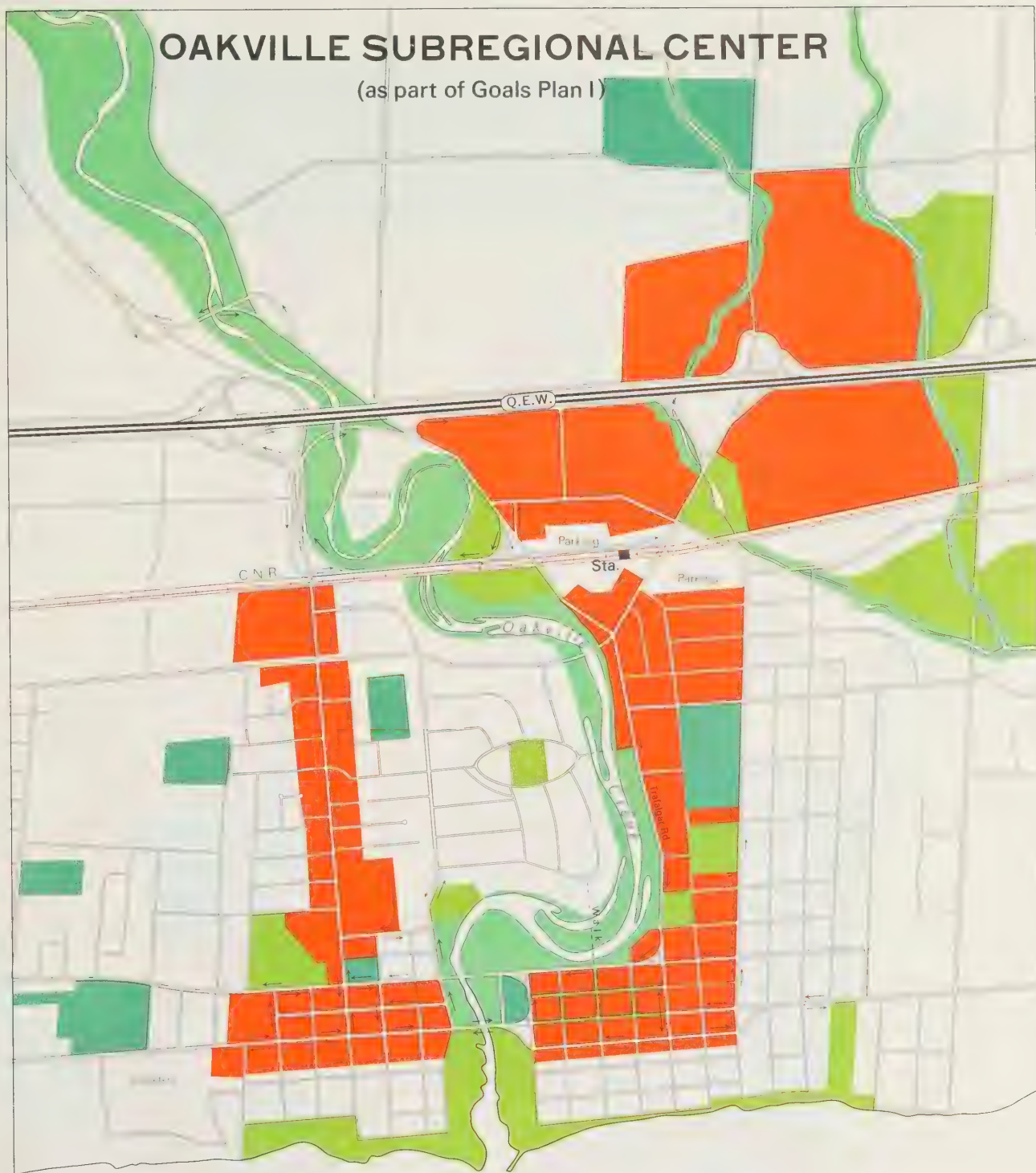
ONTARIO DEPARTMENT OF MUNICIPAL AFFAIRS  
COMMUNITY PLANNING BRANCH  
1966





# OAKVILLE SUBREGIONAL CENTER

(as part of Goals Plan I)



L A K E O N T A R I O



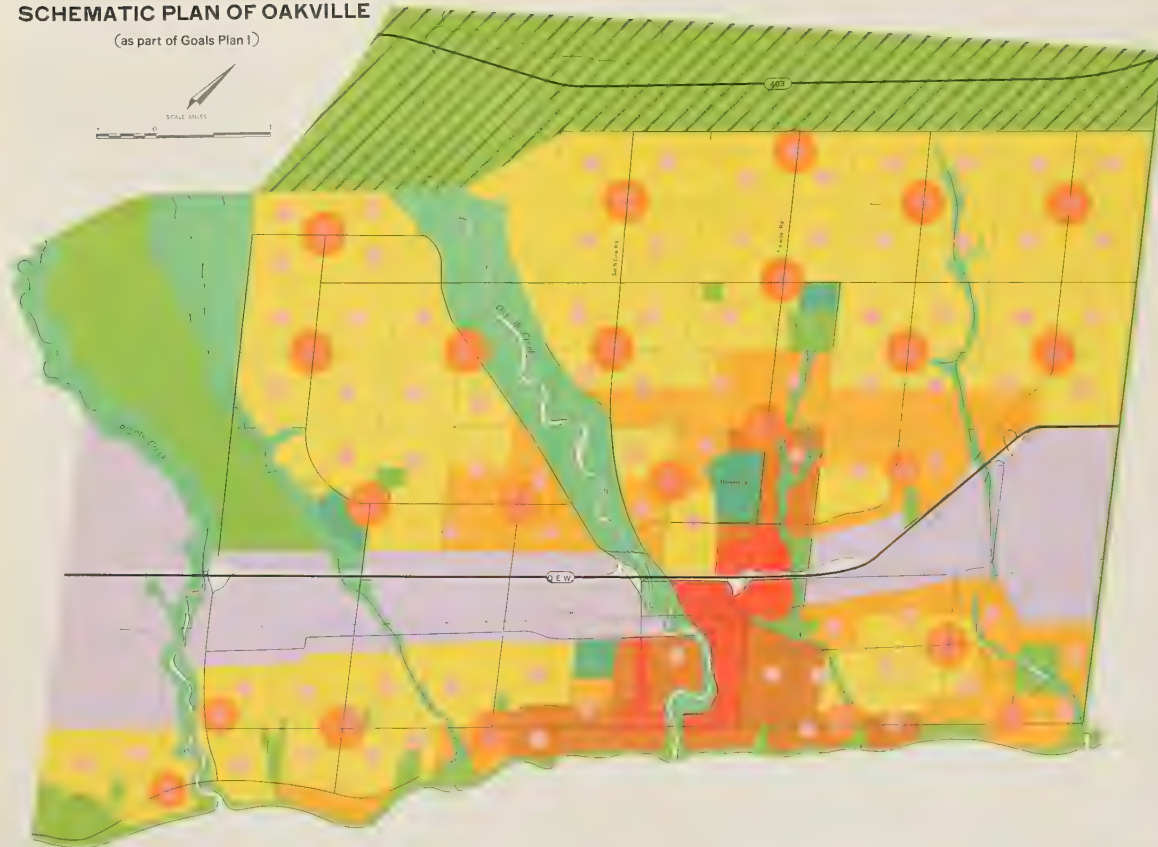


- LEGEND**  
MAP 9
- Subregional Centre
  - Special Use
  - Major Recreational
  - Public Park
  - Mall
  - Railway, Commuter - High Speed
  - Expressway
  - Major Road
  - Minor Road

Maps 9 and 10 are intended to demonstrate the manner in which a typical *corridor city* could be integrated with its *subregional centre* and with the region to express the Plan's goals and principles. Neither criticism nor suggestion for immediate change of the Oakville Official Plan is implied by the use of Oakville in this example.

## SCHEMATIC PLAN OF OAKVILLE

(as part of Goals Plan 1)

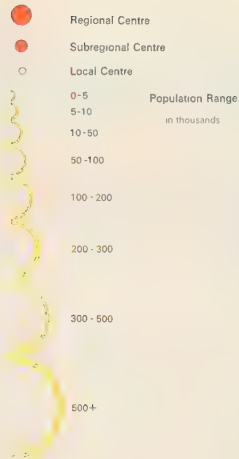


- LEGEND**  
MAP 10
- Residential**
- High Density
  - Medium Density
  - Low Density
  - Industrial
  - Subregional Centre
  - District Centre
  - Neighbourhood Centre
- Special Use
  - Major Recreational
  - Public Park
  - Parkway Belt
  - Railway, Commuter - High Speed
  - Expressway
  - Major Road
  - Minor Road





# LEGEND



## GOALS PLAN II 2000





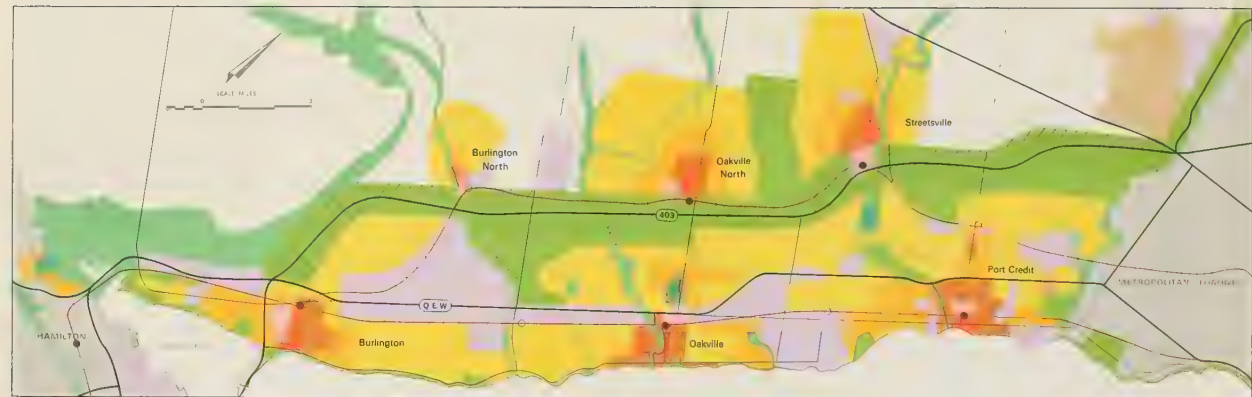
# CORRIDOR CITIES

( as part of Goals Plan II )

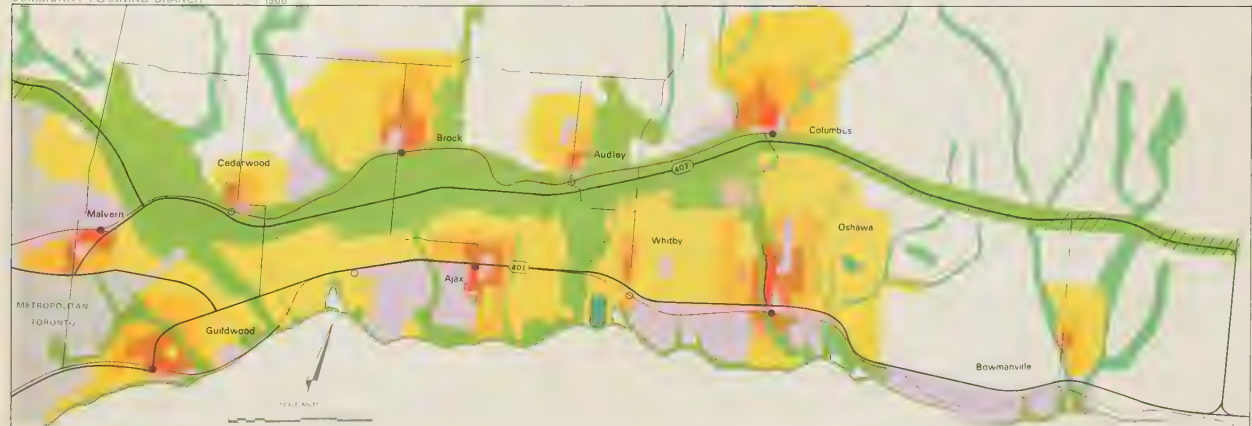
## LEGEND

- Subregional Centre
- Local Centre
- Community Facilities
- Residential
  - 60
  - 35
  - 15

Persons per gross acre
- Industrial
- Special Use
- Landform Feature
- Major Recreational Area
- Parkway Belt
- Airport, Rail Yard
- Railway, Commuter, High Speed
- Station (Express, Local)
- Railway
- Expressway
- Major Road



ONTARIO DEPARTMENT OF MUNICIPAL AFFAIRS  
COMMUNITY PLANNING BRANCH 1966





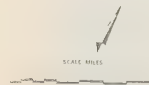


# GOALS PLAN III

2000

## LEGEND

- Regional Centre
- Subregional Centre
- Local Centre
- 10-50
- 50-100
- Population Range  
in thousands
- Landform Feature
- Parkway Belt
- Railway
- Railway, Commuter, High Speed
- Rapid Transit (Subway)
- Expressway



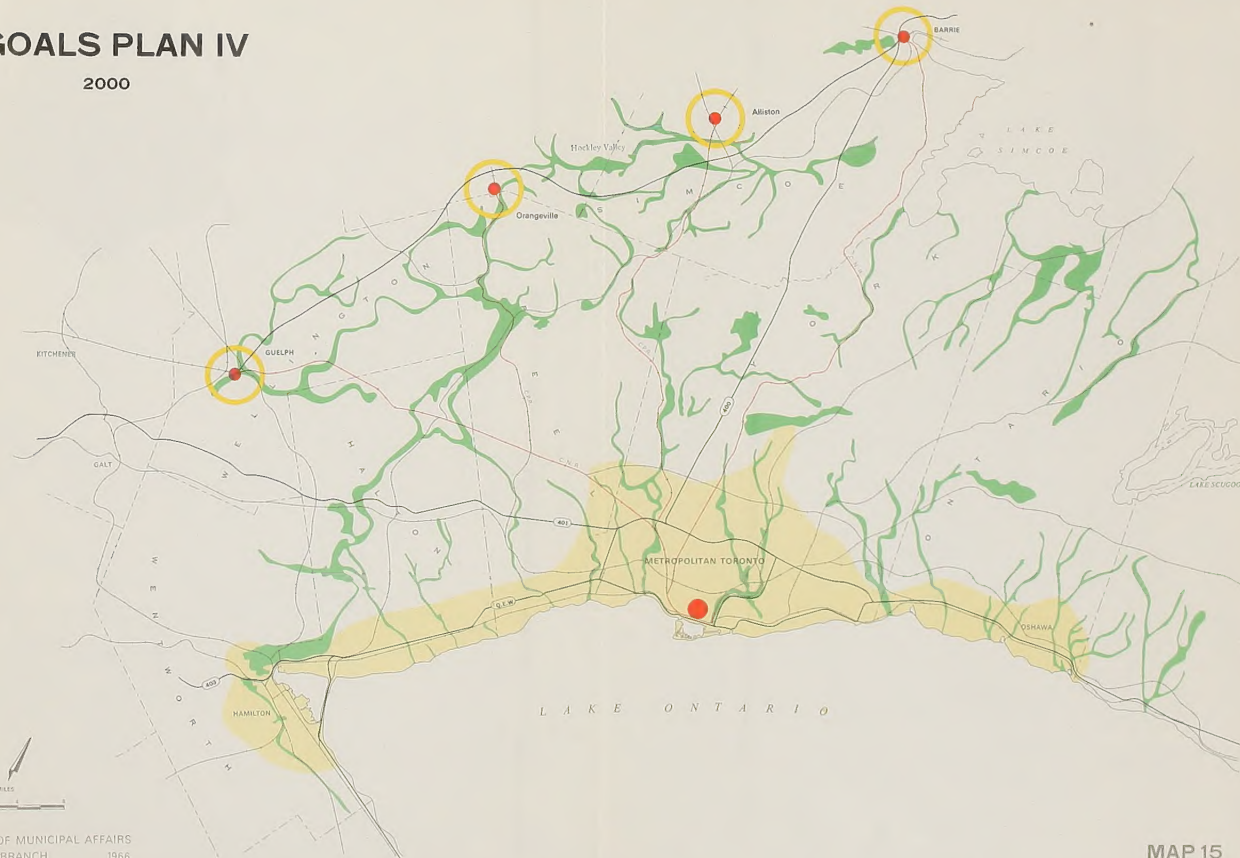


# GOALS PLAN IV

2000

## LEGEND

-  Regional Centre
-  Arc City
-  Landform Feature
-  Railway
-  Railway (Improved Service)
-  Expressway









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